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MUNICIPAL FRANCHISES

MUNICIPAL FRANCHISES

A Description of the Terms and Conditions upon which Private Corporations enjoy Special Privileges in the Streets of American Cities

BY

DELOS F. WILCOX, PH.D.

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IN

TWO VOLUMES

VOLUME TWO

TRANSPORTATION FRANCHISES

TAXATION AND CONTROL OF PUBLIC UTILITIES

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PREFACE TO VOLUME TWO.

WHATEVER may be the merits of this book, it is a product of great labor. Volume One, published a year ago, contained a brief introductory part devoted to a general analysis of the nature and significance of public utility franchises, the ways in which they are acquired and the various means adopted at different times and in different places, to protect the public interests in connection with the operation of public utilities by private corporations. Volume One also contained a much larger part devoted to a description of typical franchises actually in operation in various cities of the United States, covering those utilities which are distributed by pipes or wires in the public streets, namely: electric light and power, the telephone, the telegraph, messenger and signal service, electrical conduits, water supply, sewerage, central heating, refrigeration, transmission of mail and merchandise by pneumatic power, pipe line distribution of oil and artificial and natural gas. Some interesting things have happened in the franchise line since Volume One was published. The most important of these, so far as the classes of franchises treated in that volume are concerned, is the Minneapolis gas settlement of February and March, 1910. This settlement is so noteworthy, especially in view of the conditions contained in the old gas franchises of which mention was made in Volume One, that I have reprinted, substantially in full, as an appendix in Volume Two, the Minneapolis gas franchise passed February 23rd, 1910, and the Minneapolis gas regulation ordinance passed March 24, 1910.

The present volume includes a part devoted to a description of local transportation franchises in a large number of American cities. The utilities considered are street railways, elevated railroads, subways, interurban railways, bridges, viaducts, toll roads, depots, belt line railroads, spur tracks, docks, markets, ferries and omnibus lines. The immense importance

of these utilities coupled with the wealth of documentary materials available in regard to many of them, especially street railways, has made this part of the book more bulky than was originally intended. It is hoped that with the help of the carefully prepared index those readers who desire to refer to a particular city or a particular subject will have no difficulty in finding everything there is in the book bearing on the matter in which they are especially interested. I have also taken the precaution to place early in the volume a chapter on "Elements of a Model Street Railway Franchise," which I desire especially to commend to the attention of my readers, as it contains constructive suggestions which are deemed to be important. I am particularly anxious that every one who consults this volume should get the author's point of view as respects the public nature of the street railway and the imperative necessity of gradually amortizing the capital now invested in the business instead of continuing the policy of reckless finance which has been characteristic, in large measure, of street railway companies.

In the last part of the book the discussion relates to a number of interesting and important items in the general franchise problem, such as the constitutional and statutory safe-guarding of franchise procedure, the regulation of public utilities by state and local commissions, franchise taxation, capitalization and municipal ownership. These subjects are so broad and so complex as to deserve extended discussion in a separate volume. All that has been attempted in the concluding chapters of this book is a brief and somewhat rough statement of what I consider to be the more important general principles that should govern public activities in relation to the public utility problems there considered.

Franchises are often thought to be difficult and technical, fit only for the consideration of experts. Yet, as a matter of fact, they are about the most interesting of all the things with which municipal government has to deal. The very extremities of the body politic,—the individual households and the individual people, men, women and children,—are daily touched and controlled by the vital forces set in motion by franchise grants. Light, heat, communication, transit, and sometimes water itself, the prime necessity of urban life, are brought into the people's homes or past their doors by fran-

chise agencies that are, in large part, invisible. The relation of the civic mind to public utilities is much like the relation of the individual mind to the nerve system and the blood vessels of the human body in the days before physiology had revealed the body's internal mechanism and functioning. Some day, cities will come to self-consciousness and begin to see the significance of the numerous, but isolated franchise sensations that are now felt in the every-day life of the individual citizens without being half understood. When the connections are made and the psychological circuit is complete, franchise books will no longer be looked upon as necessarily abstruse but will be regarded as a form of popular literature.

In the preparation of Volume Two I have omitted the "List of Authorities," as it would be little more than a list of available documents of particular cities, all of which are referred to in the foot notes scattered through the body of the book. Any one desiring to find the author's sources of information as to a particular city, can do so by consulting the index and referring to the pages where the city is mentioned.

I am under especial obligations to my friend and colleague, Dr. Robert Harvey Whitten, Librarian-Statistician of the Public Service Commission for the First District, New York, who has generously helped me in getting materials for this work, and to Mina Gates Wilcox, my wife, who has prepared the indexes of both volumes, much to my relief, and who has endured with patience the devotion for more than two years past of practically all my waking hours at home to the writing of this book.

It is probably needless for me to say that the opinions expressed in this book are my own and should not be considered in any case as reflecting the views of the Public Service Commission for the First District.

DELOS F. WILCOX.

ELMHURST, N. Y.,
January 8, 1911.

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277. Public nature of the street railway business.—The whole street railway problem turns upon the point as to whether the business is public or private in its nature. In this country it has generally been treated as a private business somewhat "affected with a public interest." If it is a private business, then the ever-controlling motive in it is the making of profits. If it is a public business, there are other controlling purposes which may in case of conflict over-ride the motive financial gain.

In the early history of railroads, the new enterprise was endowed with a share of sovereignty which enabled the railroad corporation to acquire a right of way by taking private property in condemnation proceedings. By this fact alone the railroad was characterized as a public improvement. Indeed, the public character of the railroad was so fully recognized that both the federal and the state governments, as well as many municipal subdivisions granted subsidies or loaned their credit to railroad projects. In some cases railroads were even built directly by the public authorities. The disasters that followed the loaning of public credit to the steam roads and the construction of steam roads as public improvements in the reckless pioneer days, led to the general

repudiation of the theory of the railroad as being a public enterprise. The development of transportation lines was left to private initiative endowed with the sovereign power of eminent domain and guided by the sole motive of profit. Although the highway has been from the earliest ages one of the principal assets of the state, the spirit of private enterprise in this country has been so dominant that even the main wagon roads were often in the early days turned over to private corporations to construct and operate for profit. Nevertheless, the public control of the road system is so imperative that most of the toll gates have long since been removed and the turnpike companies have fallen into decay. The railroads, however, which are in reality the most important highways of the country, have remained in private hands, and the right and duty of the state to control them is only beginning to get practical and effective recognition. Even now railroads are built only where and when private capital thinks it sees a chance for profitable investment. For the most part, the interests of the public are conserved, if at all, by the limitations placed upon private initiative in the laws providing for the incorporation of railroad companies or regulating their modes of acquiring special franchises.

In the earliest days of the street railway, the public nature of the new undertaking seems in many cases to have been clearly recognized. This is shown by the fact that in the pioneer franchises granted during the decade just before the Civil War, the great cities often reserved the right to purchase the roads at some future time for public operation. This was true of some or all of the street railway franchises granted in those times by Philadelphia, Chicago, Boston, Baltimore and New York. After the business had been once firmly established, however, the original reservations of the right to purchase were in a number of instances abrogated. When street railway companies came to be organized under laws adapted specifically to their needs the right of eminent domain, which had been universally conferred upon the steam roads, was in some cases withheld from the street railways. In place of this particular element of sovereign power, there was conferred upon them the even more important privilege of using public property for private profit. The state, in-

stead of conferring upon the private companies the powers requisite for the acquirement of private rights of way, itself furnished the right of way. In spite of the obviously sovereign nature of this special privilege, the street railways, once they were established, followed the steam roads in being regarded as private undertakings. The revival in comparatively recent years of the recognition of their public character has been due primarily to two factors, namely, the monopoly character of the street railway business and the public necessity that has developed for additional transit facilities at points where the motive of private profit if left to itself would not furnish them.

Any private monopoly is obnoxious to the prevailing theories of equal freedom. Much more obnoxious are those private monopolies created by the government itself and established as perpetual witnesses of special privileges conferred by the forms of law but contrary to the essential principles of law in a modern democratic state. Sovereignty is public in its nature. If sovereign powers are conferred upon private individuals, they may not in the nature of the case be conferred forever or for any other purpose than to enable those receiving them to perform a public function for the benefit of all. The spectacle of private corporations enjoying a monopoly use of public property subject to little or no control and, with the proverbial certainty of death and taxes, levying tribute upon great multitudes for transportation facilities, a prime necessity of urban life, has roused public resentment and sharpened public wits to pry into the nature of the business. It has been seen that the granting to a private company of the privilege to lay permanent fixtures in the streets and to operate cars over them for profit, with the right of way as against all other comers, is an act of tyranny unless the company is looked upon as an agent of government performing a public function and subject to the obligations incident to such an agency. This argument for the public nature of the street railway business is based upon the character of the means necessarily employed in carrying it on. The street railway must have a continuous right of way which it can get only by a use of sovereign power or by an exclusive use of public property.

From the opposite point of view, also, that is to say, from

the standpoint of the function performed, the public character of the street railway has come more clearly into view in recent years with the recognition of the imperative political necessity for the relief of urban congestion. With the failure of private enterprise, motived by desire for profit, to provide the transit facilities that the cities must have, we have been moved to inquire what obligations have been imposed along with the sovereign privileges granted. As the power is public in its nature, so must the duties be.

A realization of these principles is transforming the attitude not only of public opinion but of the public in its organized political capacity toward street railway companies and street railway franchises. We have now reached the stage where a street railway company is looked upon as a contractor for the performance of a public service, rather than as a private holder of privileges entitled to exploit a business for unlimited profits. With this change of the public point of view there has come a better recognition of the obligation to respect or even to guarantee the investments of companies engaged in the performance of a public service. The stocks and bonds of street railways are beginning to be considered as bearing essentially the same relationship to the people and property of a city as that borne by the bonds issued directly by the municipal government. We are settling down to the conclusion that the granting of special franchises to private companies is unjustifiable upon any other basis than the recognition that a public franchise is a public trust and that a public utility should be conducted on the principle of limited risk and limited profit. This means, substantially, that the obligations imposed in connection with the use of special franchises should be made to balance the value of the privileges conferred. Then a franchise would be nothing more than a contract under the terms of which the contractor would be required to render service at cost, including operating expenses and a limited but certain return upon invested capital.

278. Street railways in relation to the distribution of population.—Substantially all the physical, moral, social, and political evils characteristic of great cities are directly due to congestion of population. That great economic advantages are the immediate result of concentration of population

in great centers of trade and industry, is an undisputed fact. The ultimate cost of these advantages is usually treated as something to be figured out later. Suffice it to note that the abnormal conditions of crowded city life have long been recognized as constituting a grave national danger. Although the provision of sanitary sewerage and an abundant public supply of water, free libraries and an elaborate educational system has gone far to overcome the physical disadvantages of congested life, congestion remains the deadly foe of city childhood. With all the palliatives that an intelligent, liberal and industrious city government may apply to the living conditions of the tenement house population, it still is an absolute fact that congestion, even at its best, is a menace to civic and national welfare. The only immediate solution or even partial solution of this problem is to be found in the development of the street railways. In 1907, according to the figures collected by the United States Census Bureau, the street and electric railways of the country operated a car mileage equivalent to the passage of 64,000 cars once around the earth at the equator. If we assume that each car had a capacity of fifty persons, we may say that the street and electric railways of the United States in a single year furnish transportation facilities to carry the entire population of a city like Detroit eight times around the globe. It is apparent that the expense of moving people to and fro by means of street railways is an enormous burden upon the community. It is a portion of the price of life in cities. In spite of the wonderful development of street railways in the United States, where undoubtedly urban populations are more widely spread out than in most countries, the congestion that remains unalleviated by the enterprise of the street railway companies is still appalling. If it is once recognized that congestion is fundamentally an evil toward the removal of which the state and the city should bend every energy, the importance of transit facilities as a means of accomplishing this purpose cannot be denied. While the disadvantages of crowded life in the center of a great city are many and fundamental, it is to be noted that congested life has certain subtle attractions which to a considerable extent transform character and develop a social disease. If this malady runs too long in any particular case, the patient gets to like it and

will refuse to take the medicine necessary for a cure, even when it is offered to him. The tenement habit is one of the most powerful and subtle social forces of the present day. It is therefore necessary that transit facilities designed to overcome congestion must be attractive.

There are a number of important elements that must be combined in the operation of street railways to render them an efficient cure or preventive for congestion of population. In the first place, the street railway system must tap residence areas large enough to accommodate in comfortable homes the families of all the people whose work requires their presence during the day at the business center of the community. Different measures may be undertaken for the purpose of distributing business itself, such as sending manufactures into the country or into small towns, limiting the height of office buildings, or widening streets and thus limiting the amount of ground space available for business at a particular center. But so long as business is congested it is the first problem of the street railway to reach out far enough to take the workers to residence districts where congestion is not necessary. In the case of a city so situated that the areas surrounding the business center in all directions are available for residence purposes, the problem of distributing population is comparatively simple. A street railway system reaching two miles from the center of town will tap four times as much territory as a system extending only one mile from the center. That is to say, the area available for residence purposes increases as the square of the radius of the transportation zone. There are few cities, however, where the problem of the distribution of population is as simple as it would be in this typical case. In many cases the business center is situated on the water front so that the city must grow in the form of a semicircle. In other cases the growth of the city is hemmed in by surrounding hills or swamps unavailable for residence purposes. In all such cases the street railways must extend farther from the business center than would otherwise be necessary to open up adequate residence areas.

Coupled with the element of distance as a fundamental consideration in the usefulness of a street railway system for the purpose of distributing population, is the element of

speed. If there was no limit to the amount of time which the citizens could spend each day in going to or coming from their work, the husky ones could walk. But the hours of necessary labor are usually so long that the limit of the time a man can afford to take in going to and from work is an hour each way. It becomes apparent, therefore, that unless transit is sufficiently rapid to bring adequate residence areas within an hour's time of the business center, the street railway will fail to relieve or prevent congestion. Whether or not a given rate of speed, say eight miles an hour, will be sufficient to solve the problem of any particular community, depends, of course, upon the area of residence territory available within the eight-mile radius from the business center, and upon the population of the particular community. To New York City, with its business center hedged in by wide and deep rivers and with a tributary population of six millions, an average speed of eight miles an hour on the street railways is utterly inadequate to relieve congestion. More rapid transit must be had at any cost.

A third fundamental element in the operation of a street railway system designed to relieve congestion is frequency, regularity and continuity of service. Freedom of movement is regarded as so essential an element in modern economic and social life that city people will not in any considerable numbers accept as suitable residence territory any place which is dependent upon street railways for transportation facilities unless those facilities are available at regular and frequent intervals and can be depended upon at any and all times. To a person who sleeps several miles away from his place of work, means of transportation are a fundamental economic necessity.

A fourth essential element in a street railway service designed to relieve or prevent congestion, is low fares. In this country the one-city-one-fare plan has been generally followed so far as each separate operating system of street railways is concerned. In some other countries the zone system is in vogue. It is generally regarded by students of civic conditions that the public welfare demands the further development of the American system. It is considered essential to the proper distribution of population that there should be no premium put upon short rides, so far as fares are con-

cerned. To laborers, clerks, working girls and others who receive low wages, the payment of even a small amount each day for street car transportation is a matter of considerable importance. If rates are fixed according to distance travelled, a premium will be offered to the poor to settle down in congested quarters in the heart of the city. The necessity of a proper distribution of population is so imperative that the principle of a flat rate of fare for any distance from the business center within the limits of any particular urban community should be established wherever possible. Moreover, the further principle should be established that the rate of fare must be as low as it is possible to make it and keep the street railway business self-sustaining. In cities where a lower rate of fare is charged on certain lines than on others, the benefits are largely lost to the people who ride on the cheaper lines because of the fact that the differentiation in rates enables the landowners to increase their rents at points tributary to these lines. With a uniform low fare and quick transit in all directions from the heart of the city, it is manifestly impossible for the landowners to snatch away the benefits of cheap transportation, for the advantages of low fares apply equally everywhere. Indeed, with quick transit and a sufficiently extended street railway system, a uniform fare even if it were not particularly low would be accompanied by lower rather than higher rents.

In addition to the absolutely necessary elements of distance, speed, regularity and cheapness, there are other elements which play an important part in the serviceability of a street railway system as a means for distributing population. An hour's ride on a trolley car with good light, adequate heat, proper ventilation and a comfortable seat, is very different from a ride of a similar period on an overcrowded car, unheated, unventilated and poorly lighted. A man might well afford the time it takes to travel to and from a more or less distant home if he could employ the time in reading or conversation under reasonable conditions. But if the conditions of transit are such that an hour spent on the car is more exhausting than an equal amount of time of hard work, travelling to and fro becomes so distasteful that it will be avoided if possible. It is one of the grave difficulties inherent in the operation of a street railway sys-

tem that people generally go to and from their work at about the same time. The street railways have accordingly developed a new kind of congestion. Many a man who has a comfortable home in the suburbs is required to endure at least one or two hours a day of most uncomfortable and unhealthful congestion of population in the cars themselves. It is indeed the most difficult of all street railway tasks to supply a sufficient number of cars to give those patrons who ride regularly to and from their work a comfortable means of transit.

It is obvious from this brief discussion of the relation of the street railway service to the distribution of population, that the street railway business must come to be recognized as a public business in a peculiar and compelling sense. All theories of government that fail to provide means for effectively overcoming such a dangerous public evil as congestion of population, must inevitably break down in the face of modern conditions. The street railway is a public business not only because it shares in the powers of sovereignty and is given special privileges in the use of public property, but also because its function is an imperative public function. It is unthinkable that urban transit should continue to be dependent for its proper development solely upon the motive of private profit.

279. The interest of abutting property owners in street railway construction and operation.—Those who travel on street railways daily pass in front of the residences of many other citizens. The car that is a blessing to the man going home may be a nuisance to the man who has already reached home. A street railway line is likely to be of more benefit to the people who live a block away than to the abutters. While it is true that residents along a street railway line are usually at least as much dependent upon it for transportation as their neighbors in adjacent blocks, and consequently share equally with the others in the benefits growing out of it, they may also suffer certain important disadvantages on account of the proximity of the line. It is a recognized principle of law that a property owner abutting on a public highway has certain rights of "light, air and access," whether or not he owns the fee in the street. In a reasonably wide street, a surface railway operated by horses or electricity will not

ordinarily interfere with a property owner's light or air and only to a slight degree with his "access." In narrow city streets, however, the operation of cars in front of business places very frequently interferes with the convenient loading and unloading of goods at the curb. But in general, the most serious drawback to the abutter comes from the danger, noise, dust and vibration attendant upon the operation of cars in front of his house. While the street has been overworked as a playground owing to the neglect of cities to furnish other available spaces for the children, it is extremely desirable that in residence districts at least there should be a minimum of danger to children while crossing or even while playing in the streets. It is an element of serious danger and therefore of serious cost to have a street railway operated in front of a man's door when there are small children in his family. This fact tends to lessen the demand for houses on streets occupied by car lines and thus to depreciate the value of abutting land. Besides this element of danger, there is a very important element of discomfort and inconvenience in the noise, vibration and dust caused by street railway operation. It often happens that the frequent passage of heavy cars in front of a man's house makes conversation on his front porch or in his front rooms difficult or impossible. No one would deny the importance of such a nuisance as this. The noise of street cars on downtown streets often interferes with religious services in adjoining buildings and renders it almost impossible to hear what is going on at court trials or other public functions. Unless the streets are kept carefully cleaned and watered, the passage of cars along them is likely to keep clouds of street dust constantly in motion, thus carrying dirt and sometimes disease germs into the adjacent houses. When the operation of cars throughout the night shakes the houses and makes the windows rattle, the people who suffer from the nuisance have just cause to complain. Furthermore, the poles and overhead wires are likely to disfigure the street to a considerable extent, and in some cases to interfere with shade trees in front of people's houses. It is on account of these things that in several states no street railway is permitted to be built without the consent of the abutting property owners. In other cases, especially fine resi-

dence streets are exempted by statute or by franchise provision from use for street railway purposes. In New York it was held by a recent decision of the court of appeals that a property owner holding the fee in the street could recover damages from the street railway company on account of the noise and vibration necessarily incident to the operation of cars in front of her premises.[1] The special interests of abutting owners might, perhaps, be neglected in the general consideration of so necessary a public work as the street railway, if the abutters were not so numerous. But with the growth of a city, more and more of the streets must be utilized for car tracks, until in a city properly spread out and properly supplied with transit facilities, a very considerable proportion of all the citizens abut upon the lines and participate in the nuisances to which reference has been made. The most serious of all the objections to a street railway in front of a home is the constant danger to the little children of death or maiming. It is probable, however, that this danger will soon be overlooked in the presence of the deadlier automobile that goes everywhere, unconfined by tracks, trolley wires or franchise routes.

280. Relation of street railways to other users of the streets.—The most obvious fact in the relations of the street railway to general street traffic is that the railway has the right of way. While pedestrians and miscellaneous vehicles are not usually forbidden to use the tracks, they are required to get out of the way when a car comes along. In most streets the space occupied by a double track railway is at least one-third of the full width of the roadway. In congested traffic centers and in narrow streets the keeping of the car tracks clear constitutes a serious obstruction to traffic. It is nevertheless urged with truth that more people can be moved on the cars along a fixed right of way than could possibly be accommodated by means of miscellaneous vehicles not confined to definite tracks. Doubtless, the privilege of placing permanent fixtures in the surface of the streets would not be granted to street railway companies if it were not that the people want to ride in the cars. As a convenient mode of handling a very important class of traffic, the street car system must be put up with by the truckmen, the cabbies and

[1] Rasch v. Nassau Electric R. R. Company, decided April 26, 1910.

the coachmen. It is only when the cars are unduly privileged and cause wanton obstruction that the other users of the street surface complain of injustice.

The actual obstruction caused by the cars is often supplemented by the obstruction caused by the rails, poles and wires fixed permanently in the street. Here, too, there is some compensation, for if the tracks have the same gauge as ordinary vehicles, they are often used for heavy trucking in preference to the rough or unimproved portions of the roadway. But rails that do not present an even surface with the street grade or that are not kept in proper repair are a serious menace and obstruction to general traffic. Poles and overhead wires are obvious obstructions of a more or less serious nature. In the early days of street railway grants, the companies were required to furnish sleighs to take care of the traffic when the running of cars was prevented by snow. It later became customary, however, to require the street railways to operate continuously and to remove the snow and ice from the tracks whenever that became necessary for operating purposes. But if snow is cleared from the tracks by being thrown up in windrows on either side, it renders other means of traffic even more difficult than they would be if the snow was not piled up. The use of the streets by swift-running cars is also likely to interfere with the comfort of other users of the streets by stirring up clouds of dust.

The presence of a street railway also adds to the expense and difficulties of those who maintain subsurface structures in the streets. In laying electrical conduits, gas mains, and water and sewer pipes, it is a nuisance to be compelled to dig under street railway tracks or move them to one side so as to permit continuous operation. Every factor that multiplies the burdens of the street surface, renders excavations slower and more expensive. Finally, the electric trolley, unless constructed with the utmost care, is likely to work ruin by means of electrolysis to the structures buried in the earth.

The street railway is likely to play the bully with all other users of the street. They must kowtow to it, or get "beaten up."

281. Relations of the street railway to the men who run it.—In 1907 the street and electric railways of the country gave

work to 209,729 wage earners in addition to 11,700 salaried employees. This number represented an increase of more than fifty-seven per cent in five years. The employees of a street railway system are a highly organized body of men performing a public function. Their duties are such that they occupy a more prominent position in the public eye than many classes of employees who are working directly for the city. The street car motormen and conductors are all of the time directly serving the public and coming in contact with many different people. The relations of the street railway to the city are so intimate that the street car employees are on the verge of politics practically all of the time, and in cases where the interests of the company come to be a direct issue in political campaigns, the vote of the street car men has to be reckoned with more or less *en masse*. The continuity of street car service is so essential to the comfort as well as to the financial interests of the community, that it is almost imperative to prevent strained relations between the employer and the employees. A street car strike is a great public calamity. Moreover, the citizens must depend upon the good-will and faithfulness of the company's employees not only for continuity of service, but also for the care in handling the cars and the courtesy in the treatment of passengers which are necessary to make street railway transit reasonably safe and comfortable. The success of the street railway both from the operating standpoint and from the standpoint of the public service depends largely upon regularity. It is therefore necessary that street railway men should be alert, intelligent and constant in the performance of their duties. With the change of motive power from horses and mules to electricity, the necessary standard of intelligence of street car men has been greatly raised. A motorman in a crowded street works under a heavy strain and requires not only physical strength but mental poise. A conductor handling heavy passenger traffic in crowded cars has to have a clear head, a high degree of tact and endless patience to perform his work successfully. The public is also interested as well as the company in the honesty of the men. Through their hands flows a stream of money which represents the cost of a most important public service. If this money is not properly collected or accounted for, the earning power of the railway is impaired and the

rendering of poorer service to the public may be necessitated. From all these points of view the public has a vital interest in the character of the men employed on street cars. For the sake, therefore, of insuring good will and continuity of service, for the sake of securing highly intelligent, well-balanced, efficient, trustworthy and courteous employees, the public has an interest in the wages paid, the hours of work required and the protection given to guard the men against accidents and unreasonable exposure to the elements. Because of the fact that street railway employees occupy a strategic position in industry, as a result of the conditions of their employment, the trades-union world is especially interested in them. The interest of the public in the question of union labor on the street cars becomes acute in times of strike, when a whole city is thrown into uproar by the suspension of transit facilities and by the breaking out of the spirit of violence which is sure to follow the importation of strike-breakers to run the cars.

While the public has a more apparent interest in the relations between the street railway company and the conductors and motormen than it has in the relations between the company and its administrative officers, it is not too much to say that every city is deeply concerned in the compensation and conditions of work which control the activities of the technical men who as engineers and traffic superintendents have in their hands the practical working of the street railway service. It is of the highest importance to the country at large that the abilities and ideals of this body of men should not be perverted by the control of merely stock-jobbing boards of directors. The possibility of public ownership, as well as the possibility of good service under private ownership, depends upon the technical and practical training of these men. When the manufacture of securities and the manipulation of earnings are permitted to interfere with honest and scientific technical service, it is not merely a temporary, but even a permanent calamity to the public.

282. Street railways as a factor in the financial world.— The aggregate earnings of the street and electric railways of the country in 1907 exceeded by twenty per cent the entire amount of the general revenues of all the one hundred and fifty-eight cities of the United States having a population of

more than 30,000, derived from direct taxes.[1] Indeed, the $429,744,254 of street railway earnings was equal to about sixty-two per cent of the aggregate revenues of these one hundred and fifty-eight cities, derived from taxes, special assessments, license fees, fines, subsidies, municipal utilities, franchises, departmental fees, interest on deposits, and all other sources of general and commercial revenues. The outstanding capital stock and bonds of the street railways amounted to almost exactly twice the sum of the gross indebtedness of the one hundred and fifty-eight cities. The immense income of the street railways is derived from cash payments made either in advance or at the time the service is rendered. A street railway does no credit business. The further fact that there is invested in street railways an amount of capital about equal to the aggregate investment in all other local public utilities, adds to our respect for the street railway as a factor in the investment world. Indeed, the relations of the street railway to the great army of investors who have furnished the funds to build and equip the roads and who must depend upon the constant earning power of the properties for interest on their money, are so important as in many cases to over-ride in practical influence the demands of the public for adequate service.

The street railway question is an extremely complex one. We have seen the great importance of street railway development in relation to the distribution of population, a fundamental social and political necessity. We have seen how the street railway affects in numerous ways the public engaged in traffic, transportation, or the distribution of utilities along the public streets by other means than street cars. We have seen what a far-reaching effect the street railways have upon

[1] For figures in regard to municipal revenues, *see* Special Reports, Bureau of the Census, "Statistics of Cities having a Population of over 30,000: 1907," Tables 11 and 13 to 17. For figures relating to railways, *see* Special Reports, Bureau of the Census, "Street and Electric Railways: 1907." The following comparisons are of interest:

Gross income of street and electric railways, 1907	$429,744,254
General revenues of 158 cities derived from taxes, 1907	856,209,216
General revenues of 158 cities derived from all sources—taxes, licenses, fines, subsidies, gifts, etc., 1907	434,786,258
Commercial revenues of 158 cities derived from municipal utilities, franchises, special assessments, departmental fees and charges, interest on deposits, etc., 1907	159,205,710
Outstanding stocks and bonds of street and electric railways, 1907	3,774,772,096
Gross indebtedness of 158 cities, 1907	1,889,922,704

the home and business conditions of the thousands of abutting property owners and householders before whose dwellings the street cars pass to and fro. We have seen the vital relationship between the public and the great bodies of organized labor employed on street railways. We are now considering the interest that is supposed in many cases to run counter to all these other interests. It is often thought that perpetual franchises and strap-hanging service, which run directly counter to the interests of the public, are especially good for the investors. It is sometimes thought that the ruthless overriding of the interests of property owners and other users of the streets, helps the earning capacity of the railways. Low wages and long hours of service are sometimes believed to make for high dividends.

It cannot be denied that in a certain sense the interest of the street railway investor is in conflict with, or at least varies from, the interest of the other parties chiefly concerned in street railways. As the investor is well aware there have been enormous losses of capital in connection with the securities of street railway companies that have become bankrupt. A careful examination of the history of the business reveals the fact, however, that for the most part the financial losses in street railway securities have resulted not from the unprofitableness of the business itself, but from what may be termed the over-profitableness and consequent over-capitalization of the enterprise. In the long run, the protection of the people who invest their money in good faith in any enterprise, depends upon the elimination of the element of uncertainty and the speculative spirit in connection with it. Upon close analysis, the ultimate interests of the public, of the employees and of the investors are seen to converge upon the principle that money wisely used in the construction and development of a street railway system should receive a constant and fair return from the enterprise, but nothing more. In spite of the low rate of interest paid by the federal government on its bonds, and in spite of the glowing promises made by the mining development companies of the West, one could scarcely hesitate to declare the interests of the investor better protected where federal bonds are concerned than where the stocks of mining companies, with their unfulfilled promises of fabulous dividends, are in view. It has been said that an

undiscriminating warfare against corporations must inevitably fail because of the vast number of honest citizens whose earnings are invested in corporate stocks and bonds. It has been pointed out that the investors themselves, like the public at large, have been victimized by the misuse of corporations by unscrupulous adventurers in control of the corporate machinery. It is doubtless true that the most effective way of battling for the protection of the public interest in the construction and operation of street railway systems, is by allying the investors with the public authorities in an effort to put the management of street railway companies upon a legitimate business basis. The element of special franchise value should be strictly eliminated, as upon the basis of real or imaginary franchise values has been built up the business of manufacturing street railway securities, which has been more profitable to the manipulators in control and more disastrous to the honest investors than any other thing connected with the street railway business. The high-class men who are willing and able to conduct street railways on an intelligent basis for the sole purpose of rendering adequate and honest service for just compensation, should be left in control of the business and the get-rich-quick speculators who make fortunes in the manufacture and sale of false securities, while the business of operating the railways is being neglected, should be driven out once and for all. Fundamentally, the interest of the investor requires that the business should be conducted on the principle of limited risk and limited profits. This means that capitalization should never exceed actual investment and that speculation should not be encouraged by perpetual franchises. It means, on the other hand, that the property invested in an all-important public service should be regarded as a permanent investment to be protected with the same care as investments in streets, bridges and schoolhouses. It means that high dividends at the expense of maintenance are a delusion. In other words, it is to the interest of the investor that the entire capitalization of a street railway should represent actual physical property, constantly kept up in first-class condition and fully protected from destruction by the franchise under which it is operated. There should be a guaranty that upon the resumption of a franchise by the city or upon its transfer to another company, the physical

property will be taken over at its legitimate value, unless definite provision for the amortization of the investment has been made. The investor is not concerned, as between the policy of compensation to the city for franchise rights and the policy of lower fares to the patrons of the railway, provided, of course, that in either case a sufficient income is permitted to meet all necessary expenses and pay a reasonable return upon investment. The par value of the stocks and bonds of the street railways in most cities equals or exceeds the entire amount of the municipal debt. Having been issued for the purpose of providing funds for a business that is public in its nature and that is carried on under a delegation of sovereign power, these securities should be as carefully protected as the bonds issued directly by the city. It is only with the enlargement of the field for safe and legitimate investments with moderate returns, either by the extension of municipal functions and the consequent increase of municipal indebtedness, or by the transformation of the stocks and bonds of public utilities into securities practically guaranteed, that the speculative spirit now so rampant in American cities and so essentially disastrous to the moral and political character of the people, can be effectively checked.

283. Development of street railway motive power and equipment.—The early lines of horse railway were quite different from the elaborate systems of to-day. The small cars and the light rails laid in the streets were comparatively inexpensive. The experimental lines were in most cases short. Every principal street, or at least every principal section of a town, had its independent street railway line. For thirty years horses and mules had practically no competitors as motive power for street cars. During this period there was such a great increase of traffic and of profits that a change of motive power and an enlargement of equipment became both necessary and possible. Experiments with cable power and the electric trolley were carried on simultaneously, but unfortunately for the street railway business, the superior practicability of electric traction was not fully demonstrated until in the last decade of the nineteenth century, when large expenditures had already been incurred in the installation of cable lines in many cities of the country. The use of mechani-

cal power made possible and necessary the introduction of larger cars. These in turn, with the increased burdens of ordinary street traffic, made necessary the use of heavier rails and more expensive foundations. The growth of cities made an increase of speed necessary, and when this need was supplied by mechanical traction, new forms of equipment were required to make operation at the increased speed reasonably safe. Fenders and wheel guards, automatic brakes and enclosed platforms all became essential to the best street car construction. While the change of power removed the horses from the streets and was in that respect economical of space, this saving was to a certain extent offset by the establishment of pole lines and trolley and feed wires, which became a part of the permanent fixtures in the street. Where the cable system was used and in those few instances where the underground electric system was installed, street railway construction involved an unusual disturbance of the central portions of the street both on the surface and underneath. One of the important elements of cost in the re-construction of the street railways of Manhattan Island when the underground system was installed, was the removal of obstructions and the readjustment of subsurface structures. The car barn has always been an important feature of a street railway plant, but with the introduction of mechanical traction, the separate power house was added as a new element. Changes of motive power and the development of street railway equipment have had a great effect not only upon the service rendered, but upon the capitalization, general operating plans and earnings of the street railway business. The experimentation with the cable as a motive power was necessarily expensive and when in most cases the cable lines were finally electrified, a great amount of dead capital continued to be carried on the books as a permanent burden upon the earning capacity of the roads. In this way not only improvements but changes were carried into the permanent capital account. Traffic and earnings rapidly increased, and a considerable period of years during which general prices were falling made the fixed five-cent fare increasingly profitable in the great cities. On account of the power houses, the holdings of land required by the companies outside of the streets increased in importance as compared with the rest of the street railway property, and in most cases

the unearned increment of land value tended to the same result in capitalization as that to which the large earning power of franchises had contributed. At the same time, the economies to be derived from the generation of power at a single plant for a large system furnished one of the financial motives that brought the independent lines together. Increasing speed made through-routing of cars and long distances more feasible.

While the great improvement of street railway equipment has been of distinct advantage to the riding public, the change of motive power, the increased size and speed of cars and the additions made to permanent fixtures have greatly increased the burden laid upon the street by the street railway, and have seriously affected the rights of abutting property owners and the convenience and safety of the general public as well as of other special users of the streets. In 1907, the length of street and electric railways was 34,404 miles of single track and the number of cars in use was 83,641.[1] There were all told, 829 street railway power houses and 2,552 steam and gas engines with a total capacity of 2,384,518 horse-power, besides 228 water wheels with 91,961 horse-power capacity. It is significant that while the number of power houses had increased only three per cent in the preceding five years, the horse-power capacity of the engines had increased 83.4 per cent, and that of the water wheels 87.1 per cent. While the number of cars in use increased only 25.2 per cent, the total single track mileage had grown 52.4 per cent during the five-year period.

The equipment, even to its details, is of vital importance to all the classes having an interest in street railways. To the travelling public it is important that the tracks should be smooth and regular, the cars comfortable, commodious and well-heated, lighted and ventilated, and the power houses of ample capacity. To the other users of the street the extent and condition of the permanent fixtures, the gauge of tracks, the width and speed of cars and the proper equipment of cars with brakes and fenders are all matters of grave importance. The care of the roadway in and about the tracks is of particular consequence to those who use the streets for trucking or pleasure-driving. The property owners are especially in-

[1] Bureau of the Census, Special Reports, "Street and Electric Railways, 1907."

terested in the size of cars, the character of foundations, the weight of rails, the location of poles, the insulation of wires and all other things that tend to reduce the noise and increase the safety of street railway operation. The investors are fundamentally interested because the earning power of the road, and especially the actual value of the property upon which their securities are based, depend to a very large extent upon the nature and condition of the equipment. In spite of minor conflicts of interest, there is on the whole a general convergence of the interests of all parties concerned toward the development and continuous upkeep of the best and, to a certain extent, the most expensive and the most liberal equipment.

Experiments are all the time being made looking toward the introduction of new and more advantageous systems. Just now the monorail scheme and the storage battery car are being tested. The assured success of either of these new systems would mean a substantial revolution in street railway equipment. The rapidity with which the motive power of the street railways may be changed is shown by a comparison of the street railway statistics of 1890 with those of 1902, so far as motive power is concerned. In 1890 only 15.5 per cent of all street railway trackage was equipped for electrical operation. In 1902 this percentage had increased to 97, while at the same time the total trackage of the country had increased 177 per cent. In 1890, 69.7 per cent of all trackage was being operated by animal power, while in 1902 only 1.1 per cent of the trackage was left to the horses and mules. During the same period, the proportion of trackage equipped for cable operation decreased from 6 per cent to 1.1 per cent and the proportion operated by steam decreased from 8.8 per cent to .8 per cent.

284. The development of street railway traffic.—In 1907 the street and electric railways of the United States carried nearly seven and one-half billions of passengers who paid their fares. This means an average of eighty-five or ninety street car rides during the year for every person in the United States. In addition to this, there were nearly two billions of transfers issued. The growth in fare traffic during the five-year period from 1902 to 1907 was 55.9 per cent, while the growth in transfer traffic during the same period was

87.8 per cent. From 1890, when the transition from horse-power to cables and electricity was well under way, to 1907, there was an increase of 267.8 per cent in the number of paying passengers carried, as shown by the figures of the census bureau. It is noteworthy, however, that the number of fare passengers carried per mile of track decreased from 249,047 in 1890 to 216,522 seventeen years later. This would indicate that in spite of the tremendous development of traffic, the increase in trackage had more than kept up with it. It is significant that while traffic increased 267.8 per cent, the cost of construction and equipment increased 834.3 per cent. The average number of rides per inhabitant of the total population of the United States as estimated by the census bureau, increased from 32 in 1890 to 87 in 1907, and the average number of rides of each inhabitant of urban places having more than 8,000 population increased from one hundred and eleven to two hundred and fifty. There has been in recent years a considerable development in supplementary traffic, including the carrying of the United States mails and the carrying of express and freight. These elements are, however, as yet comparatively unimportant in the street railway business. It is primarily upon the development of passenger traffic that the future of the business depends, as its past has always depended.

It is in a measure peculiar to the street railway that its use in any particular city, as well as in the country at large, increases more rapidly than the increase of population. The bigger the town, the larger is the proportion of people whose residences are separated more than walking distance from their work, and with the enlargement of the business district, there is a great increase of traffic during the day. In spite of the competition of the bicycle and now of the automobile, and in spite of the deterrent effect of the telephone, street railway traffic continues to become of more and more importance relatively to the business and social life of the community. This constant increase in traffic is the best guaranty to the investor in street railway properties. It is all the while crowding the capacity of the equipment, however, and increasing the burden of the street railway on the street. Along with the increase of traffic there is one element that tends to prevent a corresponding increase in net earn-

ings. With the growth of towns and the removal of larger and larger numbers of people to the suburban areas, the average length of haul for each passenger is likely to increase. This tendency may in some cases be more than offset by the increase in short haul, daytime traffic that comes with the growth of a city. Indeed, there are no exact statistics available to show just how rapidly the average distance travelled by street railway passengers increases with the growth of a city or even to prove that it increases at all.

The increase of traffic not only helps the investor and affects the interests of abutting property owners and the portion of the public that uses the street in other ways than by travelling in street cars, but it especially affects the quality of service rendered to the patrons of the cars. Although it is generally uncomfortable to travel to and fro between one's residence and his work at the rush hours, it is often true that by reason of the better schedules required to handle the rush hour traffic, quicker time can be made then than during the most leisurely hours of the day. This, however, is the only substantial benefit which the travelling public derives from the increase of traffic, except the indirect benefits that result from the prosperity of the railways. The disadvantages of the travelling public are found in over-crowded cars, which are likely to make travelling an unhealthful and wearisome factor in the day's work. The greatest disadvantage, however, falls to the lot of those who reside midway between the suburbs and the business district, for with them it is next to impossible to get aboard the cars at all, to say nothing of finding seats, in the morning rush hours. By the time the cars arrive where these unfortunate citizens would get on, all the facilities of the street railway system have been taxed to the utmost by the suburbanites.

285. Development of the capitalization and earnings of street railways.—As already shown, the first street railway construction, with its short lines, light rails, small cars and animals for motive power, was comparatively inexpensive. The changes of motive power, the development of equipment and the great increase in street railway traffic and mileage have resulted in a very large legitimate increase in capitalization. It is now estimated that the tracks, street equipment and rolling stock of an up-to-date underground trolley

line in the Borough of Manhattan, New York, not including car barns, power plant and real estate, represent an actual necessary investment of more than $200,000 per mile of single track. The immense existing capitalization of the street railway companies of the United States, which in 1907 amounted to three and three-fourths billions of dollars, has been built up, however, by many powerful causes, in addition to legitimate and necessary investment in improved transit facilities. As already stated, the early horse-car lines in the large cities were extremely profitable. The result was that the street railway business attracted the attention of unscrupulous and greedy men who saw an opportunity of making great fortunes through the manufacture and sale of street railway securities based upon the earning power of liberai franchises. The first cause of over-capitalization, therefore, was the possession of too liberal franchise grants. Furthermore, the policy was generally adopted by the companies in the early years of the street railway business, of making no provision for depreciation, so that when renewals and replacements had to be made, recourse was had to the increase of capital stock or to the issuance of additional bonds. As a result of the same short-sighted policy improvements and changes in motive power only meant the loading up of the business with an immense amount of dead capital representing discarded equipment and outgrown methods of operation. Still another cause of rapidly increasing capitalization, was the policy that seems to have been followed by practically all public utilities from the beginning,—of never paying any bonds except by the issuance of others. The failure to establish sinking funds or gradually to retire bond issues, has resulted in an ever-increasing burden of capitalization. Moreover, as the credit of the street railway business became established and professional promoters and financial manipulators were attracted into this field of enterprise, the policy was established of securing practically all the capital needed for construction purposes by bond issues supplemented by the free issuance of capital stock as a bonus to investors. There is, perhaps, no other tendency connected with public utility enterprises so strong as the tendency to enlarge capitalization. This is a direct result of the transference of control from practical street railway men to the great gamblers of finance who are

not satisfied unless by their legerdemain they can create fortunes overnight out of nothing. The craze for reaping magic profits became so great at the time when the horse lines were being equipped with cable or electric motive power, that holding or operating companies formed for the purpose of combining the independent lines in each community into one vast system, often leased the original roads at guaranteed rentals so exorbitant as to fore-doom the ultimate failure of consolidation. The story of leases, high rentals and financial wreck is a familiar one in New York and Chicago, and threatens to make history in Philadelphia. The general policy of the men in control was, with each merger, either to increase the combined capitalization of the constituent companies or at least to give to an excessive capitalization already outstanding a value based upon real or fictitious earning power. To a considerable extent the early competition in the street railway business meant unnecessary expenditures for construction, and consequent over-capitalization. The immense development in traffic has saved this capitalization, however, for the most part, except in cases where more than two tracks were laid in the same street.

The figures of cost of construction and equipment furnished to the census bureau by the companies themselves show an increase from an aggregate of $389,000,000 in 1890, to $3,637,000,000 in 1907. These figures for the later year, it will be seen, correspond very closely with the figures of outstanding capitalization for the same time. It is to be noted, however, that "cost of construction and equipment" as carried on the companies' books is by no means an accurate measure of the amount of real money actually invested in the original construction and equipment of the roads; for in their accounts, the companies invariably charge up the par value of the securities issued and cash paid for the stocks, bonds and property of subsidiary companies, no matter how excessive the purchase price may have been. The state of Massachusetts has succeeded in keeping down to a fairly reasonable level the capitalization of its public utilities. One of the most effective means to this end has been the provision in the general street railway law forbidding the issuance of a greater amount of bonds than of paid-in capital stock. This matter of the relation of stock and bond issues to each

other is of great importance, as upon the prevailing practice in relation to it depends the question whether the street railways shall be controlled by promoters and adventurers who are dealing almost exclusively with other people's money, or by *bona fide* investors who have an interest in carrying on the business on a safe and conservative basis. Unlimited bond issues are a means of speculation and foretell disaster.

The present capitalization of street railways is, therefore, composed of several elements of which the following are the principal ones:

(1) An immense actual investment of capital in construction, equipment and real estate.

(2) A vast amount, chiefly of stock issues, based upon the earning power or expected earning power of franchises.

(3) A great bulk of dead capital representing worn-out systems, changed motive power and displaced equipment.

(4) A small amount of investment wasted in the duplication of plant, a portion of which has been abandoned at the time of the consolidation of companies.

(5) A very considerable sum representing securities issued for purely speculative purposes by men who knew that they were valueless, but felt able to foist them upon the public at a price.

In the long run capitalization depends upon earning power. The increase of traffic between 1890 and 1907 was approximately two hundred and sixty-eight per cent, while the increase in cost of construction and equipment as carried on the companies' books, corresponding roughly to capitalization, was eight hundred and thirty-four per cent, or more than three times as much. It is evident, therefore, that unless the street railway business shows a greatly decreased ratio of operating expenses to income, the capital invested in the business must be satisfied with much smaller returns than were available twenty years ago. While a considerable decrease in operating expenses is claimed for electric traction as compared with animal traction, the fact remains that, whatever the motive power, there are several factors which tend to a constant increase in the cost of operation, especially in great cities. The congestion of traffic in the streets, with

the resulting blockades and limitation of speed, and the increased costliness of street work resulting from heavier pavements, more wear and tear and the increasing cost and difficulty of labor operations in the streets, have a powerful tendency to force up expenses and to offset the economies of electric traction. We may also mention the forces that have been at work during the last dozen years to increase the cost both of labor and materials, resulting in a substantial change in the relative value of the fare established on most street railways. When to these causes are added the actual reduction in the money rates of fare in connection with the renewal of franchises and the regulation of charges, we can see that the actual discrepancy between the increase in traffic and the increase in investment from 1890 to 1907, is even less than the discrepancy between the increase of earnings and the increase of investment. There should be mentioned, however, the considerable increase that has taken place in recent years in the income of street railways from other sources than passengers. According to the census figures of 1907, the gross income of street and electric railways, with duplications eliminated, was $429,744,252. Of this total, the sum of $382,132,494 was derived from passengers. This represented 88.9 per cent of total income, while five years earlier the census report showed 93.3 per cent of gross income derived from passenger fares. Indeed, while the passenger income increased during the five-year period only 63.4 per cent, the income from freight increased 403.9 per cent, the income from express 288.6 per cent, the income from the sale of electric current about 160.8 per cent and so on down through a short list of items. The proportion of miscellaneous income increased from 1.2 per cent to 2.7 per cent, representing an actual increase of 291.7 per cent.

Both from the standpoint of the investor and from the standpoint of the street car patron, the problem of capitalization looms larger and larger on the street railway horizon. In all probability sooner or later the street railways will be forced to provide for the amortization of their capital, so that at any particular time the aggregate amount of securities outstanding will represent not original cost plus promotion profits, plus franchise values, plus good will, plus discounts on bonds, plus everything you can think of, physi-

cal or imaginary, that might enter into the value or esteemed value of an operating system, but rather original cost, less wear and tear, less obsolescence, less provision for the redemption of bond issues, without anything at all to stand for intangible values. As a general rule, municipal bonds are paid when due, without the necessity of refunding. The welfare of the future will undoubtedly demand that street railway bonds shall be treated in the same way, so that the business can be conducted from year to year at a higher standard of efficiency and at what is nearer and nearer a rock-bottom rate of fare.

286. Development of monopoly and affiliation with other utilities.—As already stated, the original development of the street railway business was in the shape of comparatively short, independent lines organized to serve particular streets or sections of a city where the demand for transit facilities was most urgent and promised to be most profitable. To a considerable extent, these early independent lines were not even competing, except so far as one or another secured an advantage in downtown terminal facilities or the use of strategic streets. With the changes in motive power and modes of operation, consolidation became inevitable. It was a slow and painful process, however; for the independent lines were making lots of money and control could not be acquired except after long negotiation and final settlement in many cases on the basis of extortionate rentals. With the early consolidations came longer rides and more transfers for the people and greater political and financial power for the companies. It was soon found that in spite of advantages to the public arising from combination or monopoly in the street railway business, there was a great disadvantage in the inability of the public to secure needed extensions of transit facilities. The companies, one in each city, became lords of the town. Smarting with resentment at the arrogance and real or fancied indifference to the public welfare of the street railway monopolies, the people in many cases had recourse once again to the fetish of competition. Franchises were granted for competing lines, which in most cases, after building expensive and roundabout systems, promptly swallowed their older rivals or were swallowed by them in a new consolidation. Upwards of fifty companies have been brought

together in the Philadelphia Rapid Transit system. In the little city of Nashville not less than a dozen companies were consolidated into one a few years ago. The Brooklyn Rapid Transit system, although not technically operated as a unit, has brought together under unified control what remains of the railroads of seventy-five different companies. Competition in the street railway business, although even now recurring from time to time at unguarded points, has proven itself absolutely futile. Combination has gone so far as to include not only the street railways of a particular city, but often the interurban lines running into it. In Boston, the subways, the elevated roads and the surface lines, all three, are operated by one company. Indeed, financial groups, such as Stone and Webster and the Everett-Moore Syndicate, have been formed, which actually control the operation of the street railway systems of many far-separated cities. Combination has even gone to the extent of uniting street railways under the same management with other utilities. According to the special census report for 1907, out of a total of nine hundred and thirty-nine operating street and electric railway companies, two hundred and thirty-two, or just under twenty-five per cent, operated one or more non-railway enterprises. Indeed, several companies operated three or four different enterprises in addition to the railway business. In a large majority of cases, one of the additional enterprises was the sale of electrical current. In other cases the companies were engaged in the manufacture of gas or the operation of water works. Indeed, a number of the companies were engaged in the purchase and sale of real estate, the operation of ferries, or the manufacture of ice.

287. The development of street railway franchises.—Many of the early grants of street railway privileges in city streets were made by special acts of the state legislatures. Some of these, however, required the subsequent consent of the city. It has been a somewhat general policy in the granting of local franchises to street railways, as to other public utilities, to require the formal acceptance of the terms and conditions by the grantees so as to establish a complete contractual relation between the company and the local authorities. At the present time the practice of reducing each grant to the form of a contract to be signed and executed by the city and

the grantee, prevails in many cities. Indeed, some of the earliest grants followed this plan. The common council of the city of New York in the early fifties of the nineteenth century attempted to grant certain street railway franchises with a number of important restrictive provisions included in them. These grants were reduced to the form of contracts and were accepted by the companies. Later it developed that the city at the time of making these grants had no franchise-giving authority. In 1854, however, a general act authorizing cities to give franchises, and ratifying the grants already made, was passed by the state legislature. As interpreted by the New York court of appeals, this action constituted a confirmation of the companies' privileges, but did not include a ratification of their obligations under the contracts with the city which they had signed at a time when, as afterwards developed, the city had no power to make the grants on which the contracts were based. Following the period of the earliest franchises, which were in some respects carefully drawn to protect the public interests, the form of street railway grant developed in simplicity. The result was that in those cities where perpetual franchises were given away, the public authorities now have to depend for the power of regulation principally upon the police power of the state instead of upon the terms and conditions of the franchises themselves. It is obviously more difficult to compel a company to obey orders which are based upon the exercise of the police power than to compel it to live up to the specific terms and conditions of a franchise which it has formally accepted and made a contract with the city. There is unquestionably something to be said in favor of brief general grants which leave to the control exercised by the legislature, state commissions or the local authorities, all those questions relating to the operation of a particular street railway system which can be understood better as they arise than far in advance. The practical difficulty, amounting almost to impossibility, of exercising such control has resulted, however, in the development not only in this country but in European countries and in the British colonies of a system of elaborate contracts by which every contingency, so far as it can be foreseen, is provided for. From this standpoint, no franchise is good unless it is elaborate. Notable examples of these long and complex docu-

ments are the franchises now granted by the city of New York, the Cleveland low fare ordinance ratified by the people in 1910, and the Chicago settlement ordinances passed in 1907.

The franchise situation has been rendered more complex by the adoption in many states of constitutional provisions restricting the powers of the legislature, and in some cases the powers of the local authorities or the people themselves, in franchise matters. The franchise problem is still further complicated by the adoption of general laws with numerous exceptions regulating the powers and duties of street railway companies and limiting in many ways the freedom of the municipality in imposing terms and conditions in franchise grants. Further complexity often results from the provisions of the city charter. As a result of these facts, the modern street railway franchise has come to be not only a long and highly complex contract between the company and the local authorities, but in reality a series of complex and, in some cases, conflicting laws and consents. Experience seems to have fully established the principle that the operation of a street railway by a private company, depending as it does upon a delegation of sovereign powers and the exercise of a special privilege monopolistic in its nature, cannot be safely left to public control exercised from time to time through the police power, but must be regulated by the terms of an elaborate and carefully worked out contract between the company and the local authorities. One great advantage of this plan is that it compels public officials to give detailed and careful study to the nature and circumstances of the public function which they are delegating to a private company. No delegation of such power and functions, even for a limited period, is safe unless based upon such knowledge.

CHAPTER XXIII.

ELEMENTS OF A MODEL STREET RAILWAY FRANCHISE.

288. Essential differences between monopoly and competitive grants.
289. Specific locations, subject to readjustment from time to time; consents of property owners.
290. The building of extensions.
291. Joint use of tracks and other fixtures.
292. Indeterminate franchise, subject to purchase by the city or its licensee.
293. Terms of purchase clause.
294. Service requirements: regularity, frequency, transfer stations, through routing, speed, carrying capacity.
295. Health and convenience: cleanliness, ventilation, heating, lighting.
296. Safety requirements: location in street, distance between tracks, brakes, fenders and wheelguards.
297. Public control of the street: plans to be filed and tracks to be adjusted to public improvements and other utilities.
298. Matters relating to the construction of the street: foundations, character of rails, gauge of tracks, motive power, paving, street widening, strengthening of bridges, building of viaducts, etc.
299. Maintenance of the street surface: repair of paving and track joints, cleaning the streets, sprinkling, removal of snow and ice.
300. Noise and vibration.
301. Indemnity bond to protect the city from damage claims.
302. Permanent penalty fund to enforce company's obligations.
303. Fares, tickets, transfers, regulation of rates, free service.
304. Supplementary sources of income: advertising; carrying mail, express and freight; chartered cars.
305. Publicity: prescribed forms of accounting; investigations; reports; filing of documents.
306. Capitalization and valuation of property.
307. Disposition of earnings: operating expenses, accidents, insurance, maintenance and depreciation.
308. Interest on investment; amortization; division of surplus profits.
309. Supervising authority to approve plans, hear complaints, audit accounts, certify expenditures, inspect equipment, etc.
310. Obligations to employees: protection, hours of work, wages, arbitration of labor disputes.
311. Matters often over-emphasized: compensation, car licenses, forfeiture, competition, fixed termination of grant.

288. Essential differences between monopoly and competitive grants.—The conditions of law and local history affecting street railway grants are so different in different cities and at different times that a "model franchise" is about as difficult to draft as an "average man" is hard to find. At the very beginning of this discussion, it is necessary for us to choose between monopoly and competition. A street railway fran-

chise based upon the theory that other franchises have been or will be granted to be operated by other parties in the same transit center is essentially different from a franchise granted on the theory that the company receiving the privilege will have no competitors, but will be bound as the possessor of a public monopoly to render adequate service at reasonable rates. If through necessity or choice the principle of competition is recognized, it is essential that the city reserve the right to establish a joint use of tracks at certain strategic points, or within a certain central zone, in order that all the companies may be enabled to render efficient public service by reaching the heart of the city. It is also necessary to make provision for transfers between companies if the city hopes to attain the ideal of a universal, uniform rate of fare. It is not my purpose, however, to dwell upon the special provisions that might tend to make a competitive franchise tolerable. The theory of competition in the street railway business, as well as in other public utilities, is based on the false notion that these are private functions. In the preceding chapter I have attempted to establish the fact that the construction and operation of street railways is in the highest sense a public business. If such is the case, the principle of monopoly, subject either to public control or to direct ownership, is essential for the public welfare. No better statement of this principle in relation to street railways has yet been made than that of the Chicago Street Railway Commission of 1900 in its report to the city council.

"The theory underlying the street railway policy of Chicago heretofore," said the commission,[1] "in so far as Chicago may be said to have had a policy on this subject has been that the street railway business is a competitive business; that competition should be fostered in the interest of the public and that the possibility of competition should be ever present as a means of keeping traction managers alive to their duties to the public. That theory is incorrect and unsound. Moreover, in practice it is everywhere found impossible to induce, persuade, require or compel public service corporations engaged in the same line of business to compete with one another except for comparatively short periods of time. Sooner or later rival companies of this kind will consolidate, or they will divide the territory among themselves and each will keep in its own territory, or there will be secret agreements or understandings that will suffice to eliminate all effective competition. The various gas companies of Chicago which were given franchises on

[1] "Report of the Street Railway Commission to the City Council of the City of Chicago, December, 1900," page 17.

the promise that they would compete with one another are now consolidated under one management. The principal street railway companies have carved Chicago into sections, each agreeing, tacitly at least, to serve a particular section and not to encroach upon the territory of others. Where one company has been given a franchise to enter the field of another company, as in the case of the General Electric, which was authorized to invade City Railway territory, the usual effect has been only to increase the amount of outstanding securities upon which the people will be expected to pay dividends.

"One street railway company can serve the city better and more economically than can several. The street railway business is by its nature a monopoly business. Therefore, instead of trying to foster unnatural competition which cannot possibly be maintained for any considerable period of time, the wise thing to do would seem to be to recognize the monopoly nature of the street railway business and to deal with it accordingly.

"If the slate were clean, so to speak, and the city of Chicago were in a position to deal with the problem in the manner that might be deemed most wise, the Commission would unhesitatingly recommend granting to a single corporation the exclusive right to operate street railways within the limits of the city, subject, of course, to the conditions that should logically attend such a grant. It would under no circumstances favor authorizing a competing company to enter the field. If the company given the exclusive right to provide street railway service could not or would not satisfy the public, the proper remedy would be for the city to terminate the grant and take possession of the property of the company suitable to and used by it for street railway purposes, compensation to be made for the same on the basis of its value for railway purposes but without any allowance for franchise value."

The first principle, therefore, of a model street railway franchise should be the recognition of the fact that the service can be best and most economically performed as a monopoly, and that accordingly the grant to one company should be for all the streets in the city which are to be used for street railway purposes and should apply to the entire area of the city as its boundaries now exist or as they may at any future time be extended. In the nature of the case, where all franchises are included in a single grant they will usually expire at the same time. Until comparatively recent years it has been the policy of most cities granting limited-term franchises to make the grants without any particular reference to a uniform date of expiration. From this misguided policy the cities have reaped a wretched harvest. If street railway franchises are to expire at fixed periods at all, it is clear that the franchises for all lines should come to an end at the same time in order that the city may at their

expiration be in a position to deal with the street railway problem as a whole, as its nature requires.

289. Specific locations, subject to readjustment from time to time; consents of property owners.—Having determined upon the recognition of the monopoly principle and the guaranty that the company holding the franchise shall have the right to construct and operate whatever street railways are to be constructed and operated in the city, the franchise granting authority should nevertheless enumerate the specific streets upon which the railways are to be built, leaving the use of additional streets to future determination by the city. The grant of specific locations should always be subject to the right of the city to require the readjustment of tracks from time to time, the alteration of street grades and the abandonment of the use of particular streets where traffic conditions make that desirable. In short, the control of the specific locations of the street railways should remain continuously in the hands of the public bodies. Prior to the commencement of construction, the company should be required to file with the city maps and plans showing the proposed type of construction and the exact locations in the streets, subject to the approval of the city engineer, the board of public works, the department of public utilities or the council, as the case may be. It is not desirable that the consent of abutting property owners should be absolutely required. The New York plan of permitting a determination by the court through the appointment of special commissioners to take evidence as to the public need of the construction of a railway along a particular route, in case the consent of the property owners cannot be obtained, is a good one. Provision should be made for the payment of damages to abutting owners in all cases where it can be shown that the damages are in excess of the benefits received. These damages, however, should be fixed at or preceding the time of the original construction of the railway, or at the time of changing its motive power. They should not be left as an undetermined charge against the company under which claims may be made at any time during the continuance of operation. In states where there is a public service commission or other body having general jurisdiction over the street railways of the entire commonwealth it may be well to follow a plan

similar to that in use in Massachusetts, where changes of locations by the local authorities, if not accepted by the companies, do not go into effect until approved by the state railroad commission, unless the changes are merely by way of shifting the tracks about, of substituting one street for another, or of increasing or decreasing the track facilities to accommodate local traffic conditions.

290. The building of extensions.—It is essential to the steady and symmetrical development of a city that its street railway system should be extended from year to year as population increases and new areas are built up. As a corollary of the monopoly principle in street railway management, the company should be under obligation to furnish all transit facilities that are reasonably necessary for the accommodation of the public. Perhaps the most important of all the obligations that go with the acceptance of a monopoly privilege in the street railway business is the obligation to build extensions. In the early history of American street railways, when the rivalry of different companies was depended upon to secure the construction of adequate trackage in any particular city, there was usually no provision in the franchises requiring the building of extensions. With the gradual elimination of competition, however, and with the sad experience of many cities which were unable to secure even slight extensions of transit facilities without paying a heavy price for them in the form of concessions, the practice of inserting in franchise grants some kind of a clause requiring extensions has become common. During the years when street railway franchises were most profitable, before the advent of strict public control and before the great increase in fixed charges and operating expenses resulting from heavy capitalization and expensive modern construction, it was hardly thought necessary to provide means for compelling a street railway company to accept new franchises and build new lines. The old conditions still prevail to a limited extent in many cities. In New York City, for example, there are still nearly thirty operating companies, and no provision has been made in the railroad law of the state, in the charter of the city or in any of the street railway franchises granted by the city, to compel any company to extend its lines beyond the route originally laid out or such extensions as it may voluntarily apply for.

The idea that a railroad is under any obligation to build lines other than those which it has deliberately chosen, is entirely wanting in the laws of New York. True, a company's charter may be forfeited if it fails to complete its lines as laid out in its original certificate of incorporation, but there is no power anywhere to require a company to extend those lines. The recently adopted low-fare franchise of Cleveland, which is in many respects a most progressive public document, makes no provision whatever for the extension of the company's lines except on the company's own initiative.

It is hard to lay down a definite rule for extensions that can be applied in all cases with justice to the public and without unreasonable hardship to the company. In some cities an exclusive franchise is granted with the provision that if the city council at any time directs the company to extend its lines and the company refuses to do so, the streets upon which the extensions have been ordered may be given to another company. This kind of a provision cannot be very effective unless it is coupled with the further provision that in case another company builds the lines it shall have the right to operate over the original company's tracks into the heart of the city with free transfer privileges. Unless some such provision is put in, the original company will have little or nothing to fear from rivals whose only chance is to take outlying lines which the company on the ground is not willing to build even as a part of a general system. It is obvious that if the franchise requires the company to build any extensions whenever ordered by the city council, there is great danger that the council may yield to the importunities of particular sections and especially of real estate developers and order extensions that are likely to be unprofitable from the standpoint of the company and unnecessary from the standpoint of the public.

In some cases the companies are required to build extensions whenever directed by the city council subject to the limitation that they may not be required to construct more than a certain number of miles of single or double tracks within any one year. This is the principle followed by the Chicago settlement ordinances.

In other cases, the determination as to whether an extension for which a petition has been made can reasonably be

required of the company, is considered by the board of public works or other proper city authority after notice to the company and a hearing. It is of course impossible to foretell before a particular extension is constructed just how profitable it may be. But ordinarily, a fair minded body of public men thoroughly familiar with the general needs of the community and the circumstances of the company, would be able to determine after a full public hearing whether or not the demand for a specific extension is sufficient to warrant its construction.

The theory of monopoly service does not require that each particular extension should itself be profitable or even self-sustaining. A monopoly service should be taken as a whole, the lean with the fat, and any extensions that are important for the symmetrical development of the city or for the convenience of a considerable body of people should be made, so long as their construction and operation does not reduce the earning power of the system as a whole below a certain fixed standard.

The particular nature of the extension clause in a street railway franchise must depend upon certain other features of the grant. It is impossible to require a company with a limited-term franchise and no assurance that its franchise will be renewed or its property purchased at the end of the period, to keep on building extensions as fast and as long as they may be needed to suit the convenience of the public. A model franchise, however, would not be for a limited term without a provision for taking over the property if the grant is not renewed. We may, therefore, assume that the franchise will protect the company's capital investment in extensions, as well as in the original construction, by requiring that the property be paid for. On this assumption the extension problem is much simplified. It merely becomes a problem of raising the capital for a guaranteed investment, and of operation. A street railway company whose property is secured by the obligation of the city to purchase it, or to renew the franchise, would usually have little difficulty in getting the money for the construction of extensions. In extreme cases, however, if it were not deemed just to compel the company to furnish the necessary capital, the extensions might be built by the city and paid for either out of the general treasury or from special

assessments levied upon the property benefited. In either of these cases, the title to the rails and other street equipment would remain in the city, but they might be leased for operation to the company for a rental that would at least equal the interest charges on the investment, plus depreciation. When a street railway extension is sought for the deliberate purpose of putting value into vacant land for developmental purposes, there is no reason why the extension should not be built by the owners of the land that will be benefited by it. If built in this way, extensions will not add anything to the fixed charges of the street railway system, except on account of the additional equipment required. If built by the city at large, unless the cost were to be taken out of current taxes, a bond issue would be necessary, and in that case, unless the city was prepared to subsidize the road on account of the public benefits to be derived from its construction and operation, the operating company would necessarily be required to pay the city for the use of the extensions an amount at least equal to the interest paid on the bonds issued to cover cost, together with a certain additional amount for depreciation and sinking fund. So far as the problem of operation is concerned, the profitableness or unprofitableness of a street railway extension depends primarily upon the density of population along the line at the time of construction and thereafter. This is not always true, for the extension may be made for the purpose of connecting with a park or other resort which will furnish heavy through traffic. The particular location of the extensions with reference to the general street railway system, will also have a considerable bearing upon the expense of operation.

In brief, a model street railway franchise will certainly make some provision for the extension of lines from time to time as the public need in the judgment of the public authorities may demand. If the franchise is for a limited term, the extension provision may be drafted on the basis of a certain number of miles of new construction to be required each year. It is desirable, however, that if this kind of a provision is adopted, the right of the city to require the construction of additional lines shall be cumulative: that is to say, if the company is not required to complete its maximum amount of new trackage in any particular year, it may be required

to construct a larger amount in the succeeding year or later. In view of the great uncertainty as to the rapidity of the future growth of many American cities, this quantitative provision for extensions is not a safe one, unless a very liberal annual allowance is made. It is much better to leave the determination of the desirability and the reasonableness of any particular extension petitioned for by the people who wish to use it, to a competent body such as a public utilities commission, state or local, or a board of public works, or a special council committee, with adequate provision for a public hearing. The city should reserve the right to require the company to operate any extensions built out of city funds or by the abutting property owners with the city's consent. It might be well to include in the franchise a statement of the general principles upon which the decision of the public authorities must rest. If such a statement is made, it may include a provision that a certain number of people have their residence within the strip of territory immediately tributary to the proposed extension, unless the extension is designed primarily for through traffic. It might also provide that the extension can be ordered only in case the company's profits for the preceding year have exceeded a certain definite percentage on its investment or a certain dividend rate on its stock. No such limitation upon the city's power to order extensions should be admitted, however, unless the company's financial transactions are under stringent public control so that the company's real profits can readily be ascertained.

291. Joint use of tracks and other fixtures.—Economy of investment, as well as economy of street space, requires that all permanent fixtures in the streets should be put as nearly as possible to their maximum use. For this reason cities, even where they have depended upon competition for securing adequate service at reasonable rates, have often provided in their franchise grants for the joint use of pole lines and street car tracks. The use of one line of poles for street railway purposes and for carrying electric lighting, power, telephone, telegraph and signal wires, is feasible under certain conditions. Any street railway franchise permitting the erection of overhead wires, therefore, should require that as far as possible the street railway company either use poles already in the street, which in most cases would not be feas-

ible, or having established its own pole lines, grant to other companies having overhead wires and to the city the right to make use of them so far as such additional use will not seriously interfere with the uses of the railway company.

In cities where the street railway systems have not as yet been unified and for the time being cannot be unified, it is desirable that all new grants to any particular company should reserve to the city power to give joint trackage rights over the same route to other companies. This policy has been followed to a limited extent from the earliest days of street railroading in a number of cities. Provision is often made for the joint use of tracks for limited distances by general state law. Some cities have adopted what is known as a "free zone" by which the principle of joint use of tracks is established in the central business district. In this way any new company is in a position to acquire terminal facilities at the heart of the city, such facilities being necessary not only for profitable operation but also for the accommodation of the public.

If the principle of monopoly in local street railway transportation is not only recognized in theory, but is actually established in practice and franchise policy, the question of the joint use of tracks becomes a dead issue except in so far as the principle of monopoly may be limited by permission to independent interurban railways to operate their cars into the heart of the city. Inasmuch as the local authorities can have no substantial control over the operation of interurban lines outside of the city limits, it is desirable that either independent operation of interurban cars should be permitted within the city limits or that the local company should be compelled to take the interurban cars at the city line and operate them to and from a central terminal under a fair arrangement for compensation.

If the monopoly principle cannot be fully recognized, therefore, provision should be made for joint use of tracks by different local companies and, in any case, the city should reserve complete authority to furnish terminal facilities to interurban lines. If provision is made for the joint use of tracks, one of the grave difficulties that must be overcome is the provision of a fair and reasonable method of determining the compensation to be paid by a new company to a company

already in the field. This is comparatively unimportant if the joint use is limited to short distances at strategic points where different routes are not available. If, however, joint use may be granted for any distance, it is possible that a new company may be placed in a position where it can snatch away from a pioneer company the legitimate rewards of original enterprise. This is especially true in the case of railways constructed in the first place in sparsely settled districts. There is also the possibility that blockades and inadequate service will result from the rivalry of two companies operating over the same line and endeavoring to get traffic away from each other. This result of the joint use of tracks was well illustrated in the experience of Boston prior to the consolidation of its street railway systems. It is clear that a new company coming in to use the tracks of a company already in the field, without the latter's consent, should pay as a rental a minimum equivalent to its proportionate share of the entire expense of maintaining the line of railway, including interest on bonds and a reasonable dividend on stock. Charges on account of capital, of course, should be measured by the investment in the particular line to be used. It is perhaps reasonable to leave the determination of the exact amount to be paid to agreement between the companies interested, with the right of the city, in case of disagreement, to have a determining voice in the matter either directly or by the appointment of an arbitrator.

292. Indeterminate franchise, subject to purchase by the city or its licensee.—One of the most important conditions attaching to any franchise is the period for which it is to run. During the years when neglect of the public interests in franchise negotiations was more the rule than the exception, a great many cities granted perpetual franchises. This policy has now been discontinued in most states and cities. There are few students of public utility questions outside of those who may have a direct financial interest in the companies, who would now claim that perpetual franchises for the use of the streets are in accordance with enlightened principles of government. In fact, it is almost unthinkable to a citizen of the twentieth century that special privileges in the streets of a city, granted now or in the past, should last *forever*. Even where franchises do not expire by limi-

tation and are not revocable, the right of the state to acquire them by condemnation proceedings is coming to be generally recognized. It is quite abhorrent to a sense of public justice that a franchise once granted as a free gift should not be subject to resumption without the payment of great sums of money on account of the termination of the franchise right. But it is not necessary to discuss at length the merits of perpetual franchises. They lie outside the pale of reasonable controversy.

Instead of perpetual franchises, we may have either limited-term grants or indeterminate grants. Many of the states have established a maximum period for which local franchises may be granted, ranging usually from twenty to fifty years. The short-term franchise has been extremely popular with those who feel a concern for the public interests. There are, however, a number of serious disadvantages in the short-term franchise as usually granted. In the first place, a street railway, like any other important public utility, should have a continuous and symmetrical development to satisfy the public need. There is absolutely no reason why we should expect street railway service to stop at the end of a fixed period of fifteen, twenty-five or fifty years. There is every reason to expect that a utility designed to satisfy a permanent and ever-pressing public need, especially when the utility has survived all sorts of changes and become more and more firmly embedded in the general plan of urban life during more than half a century, will continue as a public necessity for an indefinite period. While it is conceivable that some new invention of the genius of man may at some future time make the street railway in its present form unnecessary, there is no reason to expect such an event at the end of a definite period of years that can now be fixed. Changes in the arts will undoubtedly make revolutions in the street railway business in the future as they have in the past, but after all, the demand for transit facilities is as permanent as the very existence of cities. A street railway system, therefore, should be constructed, maintained and operated with the expectation of permanent service. The short-term franchise without any recognition of the fact that the street railway property will continue to be operated past the end of the term, has had bad results. Under such a franchise, in the nature of the

case, a company can hardly be induced to construct extensions into unprofitable territory depending upon the development of future traffic for its rewards. When the term of a franchise comes within ten or fifteen years of expiration, all growth is likely to cease. Not only that, but improvements in motive power and equipment are likely to cease and deterioration in the property is usually permitted. Indeed, in extreme cases where a company accepts in good faith the limitation of its franchise term, without the hope of being able to recover its investment at the expiration of its grant, it inevitably follows that the road will be operated from the standpoint of squeezing out of it the maximum revenue and putting into it the minimum for operating expenses and maintenance. Moreover, from the public standpoint, the limited-term franchise usually results in bringing the street railway question forward as a disturbing political issue at regular intervals, or what is worse, in tempting the company to keep in politics all of the time in order that it may get an extension of its rights long in advance of the period of their expiration. The evils of the short-term franchise without adequate provisions for continuity in the development or operation of the street railway system are almost as patent as the evils of perpetual grants, although of quite a different character.

In Massachusetts and the District of Columbia, street railway franchises have been granted subject to revocation at any time. This form of grant is called the indeterminate franchise. When no provision is made, however, for purchasing the physical property in case of revocation, the indeterminate franchise becomes in effect practically perpetual. This is for the reason that neither the judiciary, nor the legislature, nor the city council, nor the people at large will permit the destruction by the mere revocation of a permit of large bodies of capital invested in a necessary public service. This form of the indeterminate franchise has been called "tenure during good behavior." But the penalty of forfeiture without compensation is so drastic that behavior has to become very bad indeed before any community will punish it. It appears to be true, however, that even though under this form of the indeterminate franchise no street railway grants are in practice revoked except for specific locations where street railways are no longer desired, the com-

panies have been more diligent to respond to the demands of the public for improved service and for extensions of their lines than under either perpetual or limited-term franchises.

If we put together the principle that a public utility should be continuously and symmetrically developed to meet the needs of a growing community and the other principle that the street railway is a public business in which capital should be guaranteed a limited risk and should be satisfied with a limited profit, we may arrive at the right theory of franchises so far as the question of duration is concerned. The city cannot properly fulfill its function unless it maintains a continuous control over the several uses of the street. It must have the power at any time to change or improve any public street, and to readjust the locations and the relations of the public utility fixtures on, above or below the surface of the street. Moreover, inasmuch as the street railway business is a public function the city must remain in a position where in the event that this function is not being adequately performed, it can either resume it or transfer it to another agent. For these reasons it is an essential feature of a good street railway franchise that the city should have the right to terminate it at any time or at certain short term intervals upon giving not more than one year's notice. On the other hand, the protection of the investors who have furnished the money to construct the plant necessary for the performance of this public function, requires that in case a company's franchise is terminated the property should be purchased by the city or by its licensee. Under such a provision it will be safe for investors at any time to supply the capital for the construction, extension and improvement of a street railway system, as they will know that whatever construction expenditures are made in good faith and with good sense, will be returned to them if they are not permitted to continue the operation of the system indefinitely.

Every street railway franchise, therefore, should be indeterminate, with the proviso that a shifting of tracks or even a substitution of routes more advantageous to the public may be required at any time at the expense of the company, but that if the franchise is revoked the entire physical property shall be purchased either by the city or by another company authorized by the city to take it over and operate it.

293. Terms of purchase clause.—It has already been noted as one of the characteristics of public utility companies that they almost invariably strive to increase their capitalization to the utmost. It is even more generally true that companies which have been forced to accept a purchase clause in their franchises, use their utmost efforts to force up the price at which the property may or must be taken over. Inasmuch as the price at which a street railway system may be purchased by the city is in effect the measure not only of the company's capitalization, but of the capital value upon which the system must earn dividends or interest even after municipal purchase, the utmost care should be taken in drafting the purchase clause of a franchise. The Chicago settlement ordinances, which in many respects are most admirable and which have already had a marked effect upon the street railway policy of the country, fixed a purchase price in which was included a large amount of unexpired franchise values and of dead capital. While it may have been necessary in this particular instance to include these false elements in the purchase price, we should not forget that on general principles franchise values and obsolete equipment should never be capitalized as a permanent burden upon the future of a street railway system. If, for particular reasons under the circumstances surrounding a particular settlement, it seems necessary to include in the purchase price either of these elements, it is necessary from the standpoint of good public policy that provision should be made for their gradual amortization out of earnings. In a franchise for a new street railway system, it is reasonable that purchase by the city within a comparatively short term of years should necessitate the paying of a bonus over and above the actual value of the physical property. The payment of such a bonus may be necessary to compensate the franchise holder for being soon deprived of the opportunity to make money. Unless some provision of this kind is made, the franchise holder will be slow about building extensions upon which immediate profits cannot be realized. It would not be easy to establish a fixed rule as to the amount of this bonus or as to the length of time to elapse before its payment should cease to be obligatory in case of purchase. It may be suggested, however, that a bonus should not be less than ten per cent or more than

twenty per cent of the value of the property, in case the purchase is effectuated at the earliest possible date. If the purchase of the property is delayed, however, the amount of the bonus should gradually diminish until it disappears entirely at the end of, say, fifteen or twenty years from the date of the grant.

That a street railway company should ever pay its debts or diminish its capitalization, has hardly as yet entered into the thought of the public, yet both the desirability, from the standpoint of social welfare, of securing transit facilities at the lowest possible cost and the normal caution of the investor would seem to indicate that it would be good public policy to provide for the gradual amortization of the original construction cost of a street railway system. By this means investors would not have to run the risk of the destruction of their capital through radical changes in the business or through any other means, and when the property was finally paid for, the reduction in fixed charges would enable the public to receive service at a lower rate. In some instances street railway franchises provide that at the expiration of the term of the grant either the entire property of the company or its property in the streets, shall revert to the city without cost. A franchise provision of this nature necessarily involves the amortization of the capital invested in construction. Experience has shown, however, that under ordinary conditions this reversion scheme works out badly, as the company is almost certain to neglect the maintenance of its road for a considerable period preceding the expiration of its franchise. The result is that instead of receiving a thoroughly up-to-date, efficient street railway property when the franchise terminates, the city is likely to get "two streaks of rust." The only condition upon which a franchise may properly provide for the reversion of a company's physical property to the city without cost, is that adequate guarantees, to be enforced by the proper public authorities, shall be placed in the franchise requiring the company to set aside a certain proportion of its income from year to year for maintenance, renewals and depreciation.

The Chicago franchises established the principle of fixing at the time the grant is made, the price at which the property can be taken over in the future. This plan undoubtedly

gives the greatest stability to the company's investment and from one point of view is most convenient for the city. Under this arrangement, the city knows at any time exactly how much it will have to pay for the property in order to get it. There is no delay required for negotiations, arbitration or litigation. There is no necessity for presenting conditional issues to the electorate for their approval. When the question of the purchase of the street railway system is submitted to the people, they will know just what they will have to pay for it. On the other hand, under these circumstances the city assumes whatever risk there may be of the destruction or impairment of capital on account of essential changes in the mode of conducting the utility. With adequate provisions for annual payments to depreciation and obsolescence accounts, this danger can be minimized. If at the time of granting the franchise the city is in a position to make a careful appraisal of the property and to provide for a permanent, competent authority to control future capital expenditures and to determine from time to time the actual and necessary cost of additions and betterments, the Chicago plan is probably the best that can be devised. Under other conditions the purchase clause should provide for the appraisal of the property at the time of purchase, at its fair value as an operating plant without any consideration for franchise value or good-will. If the purchase price is to be determined by appraisal, and the appraisers appointed by the company and the city are unable to agree, the procedure for the appointment of an umpire or third appraiser, should be most carefully guarded. Where the constitution and laws of the state admit such appointments by the courts, it may be desirable to provide that the third appraiser shall be selected after notice to both parties and a hearing by the judges of a supreme court, a circuit court or an appellate court sitting *en banc.* It is extremely hazardous to permit the third appraiser to be appointed by any one of a number of judges upon application of either party without notice to the other and without a public hearing. The appraisal is the vital point both for the city and for the company in rate regulation or in purchase. Inasmuch as an appraisal is of fundamental importance for both these purposes, it is readily seen that the fixing of the purchase price in the franchise itself tends

to simplicity in the relationship between the city and the company. In such a case it is not necessary to go to all the trouble and expense of making an independent appraisal whenever the question of a readjustment of fares comes up.

There are many elements which legitimately may be considered in fixing the capital value or the purchase price or even the physical value of a street railway system. Indeed, an appraisal is so complex and is subject to so many varying conditions that it is hardly possible to include in the franchise a detailed statement of the manner in which it shall be made. The Cleveland settlement franchise provides for the classification of the property under certain definite headings for purposes of appraisal. It is well enough at any rate to declare in the franchise the general principle upon which the valuation shall be based. This may be either original investment less depreciation, or cost of reproduction less depreciation, or actual value. Where the purchase price is fixed in the grant itself, original investment is necessarily the basis of the price, and the upkeep of the property to a standard approximating full value must be protected by maintenance and renewal funds. In many cases the value of street railway properties is increased from year to year on account of the appreciation of real estate used for car barns and power houses. The purchase clause should provide for the valuation of such properties at original cost without allowance for the unearned increment. There is no more reason why the city in taking over an established street railway system should be required to pay for the normal increase in land values, than there is why it should pay for the normal increase in franchise values as manifested in earning power.

To summarize, therefore, if the city is in a position to make an adequate appraisal and to provide for stringent control of future capital expenditures, the best plan is to fix the purchase price at the time of granting the franchise, making careful provision for the maintenance and renewal of the property and for the amortization of any element of franchise values or dead capital that may necessarily be included at the start. If the city is not in a position to make such an appraisal, the purchase clause should provide for an impartial valuation of the property at the time it is to be taken over, the appraised value not to include any allowance for

good-will, franchise value or appreciation of land, but to be based on the original cost of land plus the cost of reproduction of the remainder of the physical property less its depreciation for wear and tear and obsolescence.

294. Service requirements: regularity, frequency, transfer stations, through routing, speed, carrying capacity. — The first essential in a street railway franchise, is that it shall not give away the city's control over the streets. Next in importance are the provisions designed to secure to the public adequate and efficient service. The relation that exists between the city and a street railway company is a double one. It is both contractual and regulatory. In matters pertaining to equipment and service it is obviously impossible to foresee at the time of granting a franchise, the requirements of the future in detail. It is, therefore, a wise custom not only to fix certain standards of service in the franchise contract, but also specifically to reserve to the city the right to exercise control over equipment and operation by means of administrative orders or ordinances passed from time to time as future exigencies may require. Indeed, a city would in most cases have this right under the police power, even if it were not reserved in the franchise. It is important, however, for the purpose of avoiding unnecessary litigation that the company should bind itself to obey all reasonable regulatory orders and ordinances of a general character that may be adopted by the city authorities.

While a broad general reservation of supervisory powers is in theory all that is necessary to secure to the city a continuing control of the service to be rendered by the company, it is to be noted that this sort of control is dependent for its effectiveness on permanent administrative machinery to prepare the necessary regulations from time to time and see to their enforcement. Where no such machinery is available, it is desirable that at least the general standards of efficient service should be enumerated and briefly described in the franchise itself.

The first requirement of good street railway service is regularity. Street cars traverse comparatively short distances, and there is no object in having a street railway service at all unless the people can depend upon getting cars at all times of day and at such intervals as will not require long and uncer-

tain waits. The shortness of the average street railway haul makes regularity of service even more important on street railways than it is on the steam roads, where the loss of half an hour at the beginning of a journey amounts to comparatively little in relation to the entire time required for the trip. One cause of irregularity in service is the practice that often obtains of switching part of the cars back before they reach the end of the line, so that the people riding farthest are given the most uncertain service.

Following regularity in importance, is the frequency or headway of cars. Indeed, a minimum schedule of car operation, sometimes uniform for all lines and sometimes varying according to the supposed density of traffic on the several lines, is carried into some franchise ordinances. The nature of this requirement is usually that cars shall be operated over the line at intervals of not more than a specified number of minutes from a fixed hour early in the morning to a fixed hour late at night. There is usually a special provision for the hours between midnight and five o'clock A. M., when the street railways are required to furnish what is commonly known as "owl" service, operating at least one car per hour over all their lines. In the larger cities, where traffic is dense, a simple regulation of a minimum schedule, such as that suggested, is not adequate as a complete regulation of the frequency of service. It is necessary from the standpoint of practical operation as well as from the standpoint of public convenience that the schedule of cars should be varied at different hours of the day to meet different traffic conditions. At the rush hours in the morning and the evening, it is necessary for a street railway to observe a more frequent headway than at other times. But conditions respecting traffic and, to a certain extent, the hours of the heaviest traffic, are subject to so much change that it would be futile to put the detailed schedule in the franchise grant itself. That must be left to future control by ordinance or administrative order.

Another element in good service that is frequently lacking in street railway systems is the provision of transfer stations where people who change cars and have to wait in the process, may have protection from inclement weather, and opportunity to rest in a safe place. Transfer stations are of comparatively

little importance in great cities, where cars on all lines are run at frequent intervals so that no wait under normal conditions will exceed a very few minutes. In the smaller cities, however, and in outlying districts where an infrequent headway is observed, it is of great importance that the company should be required to furnish adequate transfer stations at the intersection of lines or at other transfer points. Indeed, there is a need for such stations even in the great cities to accommodate traffic at night or at other times when few cars are running. If the streets are sufficiently broad, it is not amiss for the city itself to furnish the sites for these stations in connection with public comfort stations and rest rooms.

While comfortable transfer stations will add materially to the quality of the service rendered by the street railway company, it is important that there should be as little transferring as possible. Every transfer from one car to another is the cause of uncertainty and delay. A person going regularly to and from his work must every day add to the minimum time required to make the journey, the maximum time that he is likely to lose under ordinary conditions by reason of the transfer. This will be at least equal to the usual interval between cars on the connecting line. Moreover, when a person is required to change cars in the midst of his journey, he is likely to lose his seat if he has one and to find any reading which he had undertaken interrupted. The time lost in transferring is of no use to anybody. It is wasted. From the standpoint of the company also, it is more expensive to carry a person a given distance on two cars than on one. The expense of letting a passenger on and off a car corresponds with what are called terminal charges in the conveyance of freight on the steam roads. The loss of mechanical energy as well as the loss of time incident upon the transfer of passengers from one car to another may prove a very serious handicap to an operating company. Moreover, transfers are subject to well-known abuses which should be avoided as far as possible. It is, therefore, important from every standpoint that as one of the standards of good service the through routing of cars should be adopted as far as possible.

Most cities limit the speed of street railways either by franchise provisions or by ordinances. Sometimes speed is limited

to an average of a certain number of miles per hour over the entire route. Sometimes different maximum rates of speed are prescribed for the central business district and for the residence or suburban districts. In practically all cases the speed limit is a maximum, not a minimum, and is enforced not for the sake of insuring better service but for the sake of safety to other users of the street. It may not be inappropriate, however, for a franchise or ordinance to establish a minimum standard of speed; for one of the most important elements in the efficiency of a street railway system is the rapidity of transit provided by it. This is important for several reasons. By cutting down the time required to pass over a certain distance, the increase of speed brings within reach of the central business district a much larger area for residence purposes. Moreover, increased speed enables each car and each crew to handle more passengers during a given period of time. This results in less obstruction of the street and lower cost of service.

The most difficult of all the problems relating to service on street railways is that of the carrying capacity to be provided. In American cities crowding on the street cars during the rush hours is practically universal. The companies make money off the strap-hangers. No effort is usually made to provide sufficient service at any given time to furnish seats to all passengers. A company, looking out as it is for private gain, may be depended upon to crowd its cars as much as possible. It is, therefore, of the utmost importance that provision should be made to curb the natural tendency of the company at this point. An effort has been made in some cases to require that the company shall furnish seats for a minimum of, say, two-thirds of its passengers. Indeed, the public service commission for the first district of New York often issues a service order requiring that there shall be operated on a particular line past a particular point during every fifteen minutes, except during the rush hours, as many seats as there are passengers. It may, therefore, be said that so far as regards general service requirements, a franchise should at least stipulate for a car service operated at regular and frequent intervals, for transfer stations where needed, for through routing wherever possible, for a reasonable speed requirement and for a carrying capacity, at least

outside of the rush hours, equal to the number of persons desiring to ride.

295. Health and convenience: cleanliness, ventilation, heating, lighting.—A street car is a democratic vehicle. In it all classes and conditions of people ride together. In cities where there are "working men's" hours and "working-men's" tickets, business men and women do not hesitate to take advantage of them for the purpose of securing cheaper rides. It is true that a very few of the wealthiest people regularly use automobiles or carriages and thus preserve themselves from contact with the common herd who ride in the cars. In the near future others may use flying machines. The number of the aristocrats is so small, however, that it is hardly worth while to mention them in a discussion of the democracy of the street car. Not only do men and women of all ages, nationalities, colors, occupations and social positions ride together in the cars, but they frequently ride under conditions that compel great crowding. In large cities, where multitudes of people are compelled to spend a half hour or an hour both morning and evening in crowded cars, it is of paramount importance that conditions of travel be made as sanitary as possible. While the detailed rules and regulations relating to sanitary matters may properly be adopted from time to time as public convenience requires and the development of the art of street railway operation permits, it is desirable, as in the case of the service requirements discussed in the preceding section, that certain general standards should be established in the franchise itself.

First of all, cars should be frequently cleaned and painted inside and out. This is necessary not only for the sake of common cleanliness in travel, but also to prevent the cars from becoming breeding grounds and distribution centers for disease germs.

Another requisite of sanitary travel is that the street cars should be properly ventilated. This is a difficult matter during severe weather, for the reason that there are many passengers who think they must be protected from drafts no matter how bad the atmosphere around them may be. Cars are ordinarily ventilated through the transoms and by the opening and closing of the doors. This system is as inadequate and unsatisfactory as it is unscientific. Ventilation of

the cars is so difficult a problem, however, that it is not usually considered wise to include more than a general requirement in the franchise grant, leaving to the company and the official bodies charged with continuing regulation, the task of devising the means to satisfy this requirement. As a specific standard of ventilation, we may cite the following clause inserted in one of the recently proposed street railway franchises of Detroit, and copied almost verbatim from a general ordinance of the city relative to the ventilation of street cars, approved May 8, 1906:

"Said cars * * * shall be equipped with automatic ventilators, which, irrespective of the position of doors and windows or transoms, will of their own action, automatically cause a continuous interchange of the air in the cars when the said cars are in motion, that is, such ventilators as will not only admit fresh air to the car, but also remove the vitiated air from the car, the ventilation not to be effected by the admission of violent or dangerous drafts, but by a continuous and practically imperceptible process incapable of injuring or endangering the health of passengers. The ventilators shall have no movable parts requiring adjustment by the car operators, or subject to being tampered with by the passengers, and they shall be opeated during storm periods without admitting rain or snow through the air passages."[1]

On September 7, 1910, the common council repealed the general ventilation ordinance on the advice of the corporation counsel that it was likely to be declared invalid by the courts, no satisfactory automatic ventilator such as the ordinance called for having yet been found. On the same date a new ventilating ordinance was passed simply requiring that all cars other than open cars should be provided with ventilators which, independent of doors and windows, would by their own action when put in operation cause a complete change of air once every eight minutes while the cars were in use for carrying passengers, and requiring the conductors to put these ventilators in operation whenever weather conditions made it necessary to close the doors and windows of the cars.

Another important element in sanitary operation is the proper heating of cars. In this respect also it is difficult to establish and maintain a correct standard. There is some danger from over-heating as well as from under-heating.

[1] *See* Section 10 of "An ordinance to provide for the construction, maintenance and operation of one single, comprehensive system of Street Railways within the corporate limits of the City of Detroit," etc., presented by Alderman James Vernor in January, 1910.

In the old horse-cars it was necessary to depend upon coal or wood stoves. Modern cars operated by electricity, however, may be equipped with electrical heaters, which are both cleanly and efficient. It is not to be expected that the temperature in the cars will be maintained at the same point which is considered necessary in homes and offices. People may reasonably be expected in connection with a street railway journey to clothe themselves so that they will not suffer inconvenience from a temperature many degrees lower than what is necessary for comfort while sitting still in the parlor or at the desk. The standard recently adopted by the New York public service commission for the first district requires that cars shall be artificially heated whenever the outside temperature is below forty degrees Fahrenheit. This standard seems unreasonably low and without doubt many street railway companies keep their cars much warmer than would be required under such a regulation. In connection with both ventilation and heating, reference should be made to the practice of operating open cars in the spring, summer and fall. While the open cars under ordinary conditions in hot weather are much to be preferred to the closed cars, there is grave danger to passengers when the open cars are put into operation too early in the spring or are kept in operation too late in the fall. This practice often results in unnecessary and dangerous exposure to passengers, especially in those portions of the country where during the spring and fall violent changes of the weather are of frequent occurrence. Another drawback of the open car is the exposure of passengers to wind, dust and rain, which are likely to interfere with reading on the cars and to render travel uncomfortable and inconvenient.

Finally, it is of great importance for the protection of passengers' eyes that cars should be properly lighted. Electricity as a motive power has great capacities. It not only propels the car but may be utilized to heat and light it. If, however, the power supply is inadequate there is danger that during the rush hours when cars are loaded with passengers and operate at frequent intervals, there will be insufficient current to furnish bright light. With the enormous amount of time which passengers in the aggregate necessarily spend on the cars, it is inevitable that they should at least attempt to

save some of this time by reading their newspapers or books of interest. Inasmuch as the eye is one of the most delicate and most useful organs of the body, lighting conditions, even if they are only slightly unfavorable, have a serious effect in the aggregate because very large numbers of people are subjected to them.

A street railway franchise, therefore, should contain a general clause requiring that cars be kept clean and properly ventilated, heated and lighted, leaving the detailed regulation of these matters to later ordinances or administrative orders.

296. Safety requirements: location in street, distance between tracks, brakes, fenders and wheelguards.—One of the fundamental considerations in granting a franchise for a street railway is to insure that operation shall be reasonably safe. No matter how convenient a public utility may be, it is intolerable that it should be admitted to the use of the street if such use will seriously endanger the lives of the patrons of the utility or of the people who frequent the street in other ways. Street railway operation at best is dangerous, especially in the crowded portions of a city where children throng the streets.

The first element of safety in street railway operation is the proper location of the tracks. It is not only inconvenient but dangerous to permit double tracks in streets so narrow that an ordinary vehicle cannot pass between a car and the curb with a considerable margin of space. It is unsafe also to let street railway tracks be laid near the curb or where in turning corners or otherwise the cars will swing over the sidewalks and strike people unawares. The most approved plan for laying out a street railway system includes double tracks in streets that are wide enough to permit two tracks in the center of the roadway with plenty of room for passing vehicles on either side, and single track loops through streets that are too narrow safely to accommodate double tracks. It is generally considered wholly undesirable to permit the construction of more than two tracks in any street except at terminals and in streets that are wide enough to admit of the construction of two pairs of tracks separated by a central strip devoted to trees and shrubbery so as to make practically a double street.

The distance between tracks is a matter of almost as great importance for safety as the general location of tracks in the street. Where the companies are required to pave between the tracks, there is a natural tendency on their part to bring the tracks as close together as possible. Of course a certain width of separation has to be maintained in order to enable the widest modern cars to pass each other in the street. It is of considerable advantage to the other users of the street that a pair of tracks should occupy as little space as possible. On the other hand, safety of operation seems to require that the tracks should be wide enough apart so as to permit a person to stand in safety between the tracks while two cars pass each other. The Chicago settlement ordinances establish a minimum distance of 9 feet 8½ inches between track centers, subject to exact determination by the board of supervising engineers. At the beginning of the rehabilitation of the Chicago street railways, the board established this minimum distance as the standard for reconstruction work, but shortly thereafter Mr. Bion J. Arnold, chief engineer and president of the board, called the matter up for reconsideration and urged that the standard distance between track centers be changed to 10 feet 2 inches, and that the width of cars used be reduced from 9 feet to 8 feet 6 inches, leaving a clearance of 20 inches between cars. In discussing the matter he spoke of the necessity of allowing the greatest practicable clearance between the outside of the cars and the posts of the elevated railroad structures in the downtown district, as well as the greatest possible clearance between the cars and the curb. These points had controlled the board's original decision in the matter, but in Mr. Arnold's opinion, arrived at after further investigation and thought, the advantages secured by the narrow space between tracks were not sufficient to overbalance the greater element of danger to the public involved in having the tracks so near together that persons caught between cars would be rolled or crushed. In explanation of the fact that in many cities the cars as now operated do not have a sufficient clearance so that persons can safely stand between them, Mr. Arnold said:[1]

"Those who contend that the space between cars should be narrow have more examples in their favor and more precedents to go by than

[1] First annual report of Board of Supervising Engineers, Chicago Traction, page 408.

those who contend for a wider space, for the reason that there are more cities operating with narrow space between the cars, but I am inclined to think that the conditions where the narrow space is used were not brought about through choice but from compulsion for different reasons. I believe that the tracks in these cities where the cars are now running close together were originally laid sufficiently far apart to allow a reasonable clearance space between the type of car then in use, viz., horse-cars, and for which the tracks were built. The adoption of electricity has introduced a much heavier type of car and with it came the adoption of the cross seat, which necessitated wider cars, and as it was expensive to relay tracks throughout these cities, the original distances between centers were adhered to and wide cars allowed to come closer together, thus reducing the clearance space, instead of this narrow clearance space having been adopted through choice. The fact that these tracks were originally placed far enough apart to allow a reasonable clearance between the old type of cars leads me to believe that if the same men who laid down these lines originally were constructing a new system to-day they would allow a wider space between the tracks than is now used on these systems when using wider cars. In other words, this Board has the power to build as though it were building a new railroad, and I feel that it should exercise this power in favor of a wider space."

On account of what seemed to be practical difficulties in the way of widening the standard distance between track centers in Chicago, Mr. Arnold was unable to bring the majority of the board of supervising engineers to his view, and consequently the standard originally fixed remained in force.

It should be noted that a franchise requirement calling for cars equipped with transverse seats and middle aisles makes wide cars necessary and therefore compels either operation with less clearance between the cars or a widening of the distance between track centers. The transverse seats are undoubtedly convenient for the street car patrons. But under some conditions, to require them may be at the expense of safety to pedestrians.

One of the most important elements of safety in the operation of street railways is the equipment of the cars with modern automatic brakes, so that even where high speed is attained, the cars can be brought to a stop quickly. Detroit was one of the pioneers in requiring the equipment of cars with air or electric brakes. This was accomplished not by a provision of the franchises, but by a general regulatory ordinance.[1]

[1] Revised Ordinances, City of Detroit, 1904 edition, p. 272. The ordinance requiring that all cars be equipped with power brakes was approved May 8, 1900.

The problem of equipping cars with satisfactory fenders and wheelguards so as to prevent persons who are struck from being carried under the wheels and ground to death, is one that has enlisted widespread interest and experimentation. There are many different types of appliances now in use, some of them excellent and some worse than worthless. A street railway franchise should contain a clause to the effect that the cars shall be properly equipped with the best type of fenders and wheelguards, subject to the approval of the city authorities.

297. Public control of the street; plans to be filed and tracks to be adjusted to public improvements and other utilities. — If the city is to maintain responsible control over the streets, it is practically necessary that a street railway franchise should require the company to prepare detailed plans showing the exact location of its proposed tracks, switches, turnouts, etc., in all the streets where construction is contemplated and to file such plans with the city engineer, the board of public works or other proper official or board for approval and record. The filing of such plans will give the city a record of the street construction and fixtures of the utility and will at the same time offer an opportunity for the modification of the plans to meet the existing and future requirements of the streets as seen from the standpoint of the city, representing the general public. It is also desirable that the city should specifically reserve the right to alter the street grade as well as to pave, repave or otherwise improve the street without having to pay the cost of readjusting the railway tracks to the requirements of the new improvement. The city should also reserve the right to construct sewers, lay water mains and establish, remove or readjust any other fixtures of a public nature in, under or over the street without being liable to the company for any necessary interruption in street railway traffic. Furthermore, this reservation should apply not only to those improvements and functions which are directly assumed by the city, but also to other public utilities. The laying of gas mains, electrical conduits and pneumatic tubes, or the construction of telephone, telegraph and electric light wires and poles should be subject to the city's control. There is no reason why a street railway company, performing one public function,

should be permitted to balk the progress of other companies, performing other public functions in the same street. In brief, a street railway franchise should reserve to the city the unqualified power to control the uses of the street, including the distribution and redistribution of space for all public and semi-public occupants.

298. Matters relating to the construction of the street: foundations, character of rails, gauge of tracks, motive power, paving, street widening, strengthening of bridges, building of viaducts, etc.— The occupancy of the street by the fixtures of a street railway company and the continuous operation of cars over the street surface, have a decided influence upon the construction of a street. Every city roadway is a public work representing a certain investment of capital. As the uses of the street multiply and the permanent fixtures in it become more elaborate, the amount of the investment is greatly increased. It is appropriate that changes in the structure of the street itself made necessary by the operation of street railways should be borne as a part of street railway costs.

One of the important elements in the construction of a modern street is the foundation upon which the pavement is laid. It is obvious that under the tracks over which heavy cars are being continually operated, the foundation must be stronger than is required for an ordinary pavement for miscellaneous traffic. This is partly due to the fact that in street railway operation the lines of wear and tear are fixed. There is no distribution of the burden over a wide area. The foundations under the tracks are subjected to constant pounding. In some cities street foundations are naturally strong enough to support any fixtures or traffic that may be put upon them. In other cities, however, especially where the soil is clay, the construction of adequate track foundations is a difficult and expensive process. A franchise should reserve to the city the right either to construct the street railway foundation itself at the company's expense, or at least to pass upon the specifications and to inspect the work. Indeed, there are many who would follow the recommendation of the Massachusetts special committee of 1897, and make not only the foundations but the tracks themselves a part of

the general street structure to be owned by the city and leased for operation to a private company.

Next to the foundations, the most important element in the relation between the street railway and the permanent structure of the street is the character of the rails used. There are many types or rails, and the type that should be used in any particular street depends to a considerable extent upon traffic conditions and the structure of the street with reference to other improvements. In outlying sections and on unpaved streets the "T" rail is generally regarded as the most economical and satisfactory type. In the early charters one of the special characteristics of street railways was that they were permitted to be laid with a lighter rail than was allowed on steam roads. With the increase in the size and weight of cars, the tremendous development of traffic and the changes in paving materials, there has been, however, a steady increase in the required weight of street railway rails. While in the early days the rails weighed only thirty or forty pounds to the lineal yard, they have now reached a maximum of one hundred and forty pounds, although the usual minimum requirement of a modern franchise is from seventy to ninety pounds. Experience has shown that for the benefit of vehicular traffic, some type of grooved rail should be used on paved streets.

Another important element in the relation of the street railway to the construction of the street is the gauge of the tracks. In most cities, street railway tracks are built according to standard gauge, that is to say, 4 feet 8½ inches wide. The use of this standard gauge is of great importance, as it provides an iron roadway for wagon traffic over which heavy loads can be conveniently hauled. In some cities the street railways have a gauge as narrow as 3 feet 6 inches, and in others again there is a gauge of more than 5 feet. It is certainly desirable to provide in the franchise that all tracks laid should be of standard gauge.

The motive power of street railways is a most important element in the relation between the railway and the structure of the street. Roads operated by horses or by storage batteries require no special structures except straight, two-railed tracks, with the necessary turnouts, crossovers, switches

and special work at crossings. With the overhead electric trolley system, however, we have in addition to the tracks, pole lines and overhead wires. With the cable system or the underground electric system, while all overhead work is eliminated, there is added a much more elaborate structure in the roadbed itself, involving excavation to a considerable depth and the removal of subsurface structures. In crowded streets, where traffic is heavy, the underground electric system is undoubtedly the best that has yet proved its practicability. In wide streets and in outlying districts, however, the overhead trolley system is so much less expensive as to command preference. A franchise should specify the motive power to be used in the operation of the cars. There should be a clause, however, reserving to the city the right to permit, or even to require a change of motive power in case conditions arising at any future time should warrant it.

One of the most common requirements of a street railway franchise is that by which the burden of paving, maintaining and repaving the portion of the street surface in and about the tracks is laid upon the company. The theory of a paving obligation is that the company has to tear up the street in the first place in order to lay its tracks and must then restore the pavement in order to put the street into condition for general uses. Furthermore, the pavement is more likely to fall into disrepair next to the car tracks than at other places, and any reconstruction and repair work connected with the tracks or underground equipment, incidentally involves the disturbance of the pavement. A paving clause sometimes defines the strip for which the company is responsible as of a certain width for a single track and twice that width for a double track. Much more commonly, however, the strip is defined as being that portion of the street surface between the tracks, between the rails of each track and extending for a distance ranging from 8 inches to 3 feet beyond the outside rails of the tracks. Indeed, in some cases, notably in Philadelphia, the companies were originally required to pave the entire roadway, from curb to curb. If the paving obligation includes the entire space between the tracks without reference to the width, a company is naturally inclined to lay the tracks as near together as possible, and

is practically precluded from laying the tracks on opposite sides of the roadway next the curb lines, as is sometimes done in suburban sections. The widtlf of the strip outside of each rail for which the company is made responsible has been fixed with reference to a number of considerations. Sometimes the width of this strip is supposed to cover the distance which the ties underlying the tracks extend beyond the rails. Sometimes it is the width of the pavement supposed to be affected by the laying of the rails and the jarring that results from operation of cars over them. Sometimes the strip is determined with reference to the overhang of the car on the theory that the street railway company should construct the pavement to the full width over which it has a right of way. The state of Massachusetts, following the advice of the special street railway committee of 1897, has established the policy of levying a commutation tax upon the railways in lieu of paving obligations. The special committee was strongly of the opinion that the construction and repair of streets should be kept exclusively under the control of the regularly constituted local authorities. The experience of the city of Detroit, however, as a result of the assumption of the obligation to lay the foundations and construct and repair the pavements in and about the tracks on the low-fare lines has been very unsatisfactory. If the Detroit company had been required to pay the cost of the foundations and paving, the results might have been different, even though the city assumed the obligation to do the work. If we assume that a street railway system should be self-supporting and no more, it is obvious that a company should not be burdened with the entire cost of original paving in and about its tracks; for not only does the company share the use of this portion of the street with other forms of traffic, but it even furnishes in the form of its standard gauge tramway a special convenience for heavy trucking. The company's paving obligations should certainly be defined in its franchise unless they are controlled by the terms of a general state law or a special city charter. If the city is to construct and own the tracks, it naturally will build the foundations and do all the paving. If, however, the usual practice is followed of permitting a private company to lay its own rails in the public streets, it seems reasonable that

the company should be responsible for the construction of the foundations and for the reconstruction of the paving in and about the tracks made necessary by the building of the road or by the repair or relaying of the rails. The city, on the other hand, should keep its obligation to pave and repave over the entire width of the roadway, except in the cases mentioned where the company has disturbed the pavement for construction or reconstruction work. In all such cases, if the company fails to replace the pavement in a proper condition, the city should be privileged to do the work and collect the expense of it from the company. In other words, the entire work of constructing the railway in the street should be done by the company and at the company's expense, whereas the entire work of paving the street from curb to curb should be done by the city and at the city's expense.

With the development of a modern street railway system it often happens that the most convenient routes, both from the standpoint of public needs and from the standpoint of operation, traverse streets that are too narrow adequately to accommodate both the street cars and the general street traffic required of them. It also happens that bridges originally constructed for general use are not strong enough or wide enough to accommodate street railways and interurban lines. Sometimes streets descending by steep grades to a river bottom and ascending again on the opposite side to connect two portions of a city, are unfit for street railway operation because of the heavy grades. In other cases it is not deemed safe to permit street railways to cross steam roads at grade, even where grade crossings have been tolerated for ordinary street traffic. In all these cases, the installation of a street railway means an expensive reconstruction of the street by the widening of the roadway, the strengthening or building over of the bridges, the construction of viaducts across river valleys or the elimination of grade crossings. Every street railway franchise should make adequate provision for such reconstruction. The expense should be borne in most cases by the company receiving the franchise, but in the case of grade separations and in the construction of viaducts to be used for general street traffic as well as for street railway operation, it is well that the expense should be divided with the

steam roads, or with the city, or with both. Even in a term franchise, limited to a period of, say, twenty years, the city cannot foresee all of the work of street reconstruction that may be required before the franchise expires. It is, therefore, necessary in addition to providing for the reconstructions immediately desired, to reserve the right to require reconstruction work at any future time, subject to an equitable adjustment of the cost. An extreme illustration of reconstruction work that may be required to accommodate street cars is the building of a subway for the relief of the street surface. It can hardly be expected, however, that the city should have the right at any time arbitrarily to require a company holding a street railway franchise to carry through these great works of reconstruction unless the franchise makes provision for a readjustment of fares if that should prove necessary to enable the company to earn dividends on its increased investment.

299. Maintenance of the street surface: repair of paving and track joints, cleaning the streets, sprinkling, removal of snow and ice.—In the last section we discussed primarily the relation between the street railway and the construction and reconstruction of the street made necessary by the presence of the railway, or having special relation to it. In this section we have to consider the relation of the street railway to the maintenance of the street. So far as the maintenance of paving is concerned, inasmuch as the operation of the street cars subject the pavement to a special wear and tear, the cost of the maintenance of the pavement in and about the tracks may legitimately be imposed as a burden upon the street railway business as a portion of operating expenses. In order that responsibility for the condition of the street may not be divided, however, the Massachusetts plan of commuting this obligation into the form of a maintenance tax is a good one.

Many franchises require that the street railway companies keep the street surface in and about their tracks clean. There is no good reason for imposing this obligation upon companies operating by cable power or electricity, for such companies do not make a street dirty. It is different with horse-car lines, but they are now so far out of date that we may ignore them in the discussion of the terms of a model

street railway franchise. At any rate, if any obligation in relation to the cleaning of the streets is imposed upon a company, the work should be done by the city and the cost levied upon the company in the form of a special tax, the same as the commutation tax for the maintenance of paving.

The case is somewhat different, however, with reference to sprinkling and the removal of snow and ice. The street cars do add materially to the necessity for sprinkling the streets. Not only is dust manufactured by the grinding up of materials that fall upon the track, but the rapid movement of the cars tends to dry out the surface of the roadway, to suck up the dust and create a nuisance both for the users of the street and for abutting owners. Moreover, the sprinkling of the street can be more economically and conveniently done by the use of sprinkling cars than otherwise. It seems, therefore, a reasonable requirement that the streets should be sprinkled not only to the width of the tracks, but to the entire width of roadway within convenient reach of the sprinkling cars used on the company's tracks. The city should, however, furnish all the water required for sprinkling without charge to the company. The removal of snow and ice from the tracks is a necessary charge upon street railway operation. Except in the congested quarters of great cities, it is not customary to clear away snow from the streets. Indeed, in climates where the snowfall is sufficient to furnish a sleighing season, it is desirable that the snow should remain on the streets for the convenience of traffic. It must, however, be removed from street railway tracks both for convenience of operation and for the safety of the public. It is, therefore, reasonable to require in a street railway franchise that the company shall keep its tracks clear of snow and ice and either spread the snow thus removed evenly over the remainder of the street surface or remove it entirely from the street. In this connection, franchises sometimes go into sufficient detail to regulate the use of salt by the companies. On account of the inconvenience to horses resulting from the free use of salt for the melting of ice and snow, the companies are usually prohibited, where the matter is mentioned at all, from the use of salt except in the most limited way, and only on the rails and special work.

So far as the maintenance and repair of the tracks them-

selves is concerned, if they are the property of the company, the company should of course be required to maintain them. The condition of the rails and especially of the track joints and special work has a marked influence upon the life of the surrounding pavement as well as upon the noise and dangers of operation. It is, therefore, necessary that the city should retain the right to fix the standard of repair and hold the company responsible for maintaining that standard.

300 Noise and vibration.—The injury to abutting property owners entailed by the noise and vibration of the street cars passing before their doors, has been discussed in the preceding chapter. The relation of track maintenance to noise has been incidentally referred to in the preceding section. The noise problem is a most serious one. In addition to the noise necessarily made in signalling pedestrians and vehicles to get out of the way, there is a combination of grinding, screeching, rattling and pounding that often makes life unendurable in the vicinity of a car track. It is not necessary to prescribe in a franchise the exact measures that shall be taken to eliminate unnecessary noises and reduce to a minimum necessary ones. The franchise should, however, specifically require the company to operate with the least amount of noise possible and should specifically reserve to the city the right to make regulations regarding equipment and operation for the purpose of remedying the noise nuisance. This nuisance results to a great extent from defective maintenance of tracks and cars. Where the rails are not properly banded and supported at the joints, so that the foundations and the surrounding pavement are gradually demoralized, causing the cars to fall from one rail to another, there is an exasperating and unnecessary disturbance of the neighborhood. When ramshackle cars are operated with all their parts worn out and ready to fall to pieces, then we get a noise like that made by the cars of the New York and Queens County Railway Company in the Borough of Queens, New York City. Of course, noise that is the result of neglect of equipment and careless operation should not be tolerated for a day. If any practicable device should be found for the muffling of the trucks, so as to reduce the noise necessarily made in careful operation over well maintained tracks, the city should be in a position to compel the company to adopt the

device. Vibration resulting from the operation of cars is not as common a nuisance as noise, but wherever conditions are such as to give abutting property owners a constant succession of earthquake shocks, the nuisance should be abated. Any actual damages resulting from necessary conditions of operation should be paid by the company. The important thing, however, is for the city to reserve in the franchise the right to require any changes in construction, equipment or operation that may from time to time be proven efficacious in curtailing the noise and vibration nuisance. In order to preserve as nearly as possible uniformly desirable conditions of home life and of business operation in all parts of a city and on all the streets, it is especially desirable that everything should be done to make the presence of a street railway in a street both harmless and inoffensive to abutting owners and residents.

301. Indemnity bond to protect the city from damage claims.—The most nearly universal requirement of local franchises, whether granted for street railways or for other public utilities, is the provision that the franchise holder shall save the city harmless from damages to persons and property resulting from the exercise of the franchise. The city is primarily responsible for the safe condition of the streets. Accordingly, if the city would avoid endless litigation and unlimited expense it must require that each utility occupying the streets with its fixtures should bear the burden of damages done by it. The accident bill of the street railways of New York City for a single year has been as much as $3,000,000 for injuries, including the cost of litigation to defeat or reduce claims. This is an enormous burden which would inevitably be greatly increased if the company were relieved, even in part, of its financial responsibility in the matter. The ordinary indemnity bond coupled with the provision saddling responsibility upon the company is not sufficient, however, to satisfy the demands of justice in connection with the performance of a public function under delegated powers. We have already discussed the necessity of reserving in the franchise the right to compel the observance of safety regulations and the adoption of safety appliances. But even this is not sufficient. It is not too much to say that the relation of street railway companies to the settlement of damage claims

is often such as to create a menace to the body politic. Street railways are undoubtedly the victims of many damage suits brought by shyster lawyers who have no other way of earning their living than by working up fake claims on the percentage basis. On the other hand, many deserving damage claims are settled for small amounts through the ability of the company's legal army of defense to cajole claimants into the acceptance of smaller sums than they are entitled to receive. Some bad cases, which for special reasons of one kind or another the company desires to keep out of the courts, are settled for large sums. A street railway company, with its highly specialized legal department, supported by unlimited funds, is not on an equality with the poor claimant who has suffered injury from the operation of the cars. Moreover, when there is no publicity of accounts to reveal the basis of settlements in particular cases, there is no standard of justice established to be applied to similar cases. In connection with the requirement by the city of an indemnity bond, there should be a clause forbidding the company to settle damage claims out of court. It might be well to establish a special tribunal or board of arbitration to which should be referred all offers of settlement, with the right of both parties to be heard. Whenever in litigation conducted by the city itself a settlement is proposed, the terms of the settlement are submitted to the city council for approval or at least are published or reported by the city's legal officers. Similar publicity should certainly be required in damage cases in which the street railway company as the agent of the city is a defendant.

302. Permanent penalty fund to enforce company's obligations.—Many cities have trouble in compelling the street railway companies to perform their obligations in regard to construction and repair work in the street. Sometimes after the city has done the work itself, it has trouble in collecting the expense from the company. In order to avoid these difficulties, it is desirable that the franchise should provide for the deposit by the company of a permanent fund out of which the city may from time to time pay the expenses incurred by it in the performance of work that the company has neglected to do. It is well for the franchise to be perfectly specific in regard to the amount

of this fund, and in regard to the procedure by which the city can make withdrawals from it. It is essential that whenever any withdrawals have been made, the company should be required to replenish the fund to its full amount immediately, under severe penalties.

It is desirable to provide for certain automatic penalties for failure to comply in the details of operation with the terms of the franchise or of regulating ordinances. It is to the city's advantage to limit as far as possible the amount of litigation that may arise out of the attempt to enforce its rights; for litigation is a street railway company's "long suit." The object of the penalty fund is, therefore, a double one. In the first place, it will enable the city to secure the prompt performance of track and street repairs without the necessity of going to the courts. In the second place, it will put the city in a position to collect certainly and without delay the penalties imposed for petty violations of franchise duties. Only the most important questions, going to fundamental matters, should be taken to the courts. The expense and delays resulting from litigation through the state and federal courts, are so great that cities depending upon court orders for the enforcement of franchise obligations are at a great disadvantage. The permanent penalty fund need not be very large. It is not required for the purpose of imposing "cruel and unusual punishments" or unnecessary burdens upon the company. Its purpose is to secure prompt compliance with the terms of the franchise and the city's orders issued under the franchise. It is not consistent with the dignity of the municipal government in its relation to its public service agent that whenever an order relating to maintenance, repairs or service is issued, the company should stop to argue about it. The city should be in a position to make short shrift of the company's policy of delay, evasion and wilfulness.

203. Fares, tickets, transfers, regulation of rates, free service.—In this discussion of a model franchise, we have put first the provisions that will insure the continuous control by the city of the uses of the street, and second, provisions intended to guaranty first-class service. We still have to discuss those provisions of the franchise relating to fares, compensation, accounting, capitalization and disposition of

earnings. These matters are undoubtedly of great importance, but they can be adjusted properly only upon the basis of continuous control of the streets and good service, which are fundamental.

Every street railway franchise should as a matter of course fix the initial rates of fare and provide for their readjustment either at stated intervals or from time to time on the basis of the company's earnings in relation to its investment. Five cents has been the standard fare on street railways throughout the history of the business in this country. There have been, however, many variations from this rate. In the early days, companies were sometimes permitted to charge six, seven, eight or ten cents for extra long rides on the horse-car lines. On the other hand, it was not uncommon to require that children under certain ages should be carried for three cents. Usually babies in arms and very small children were to be carried free. In the early sixties of the last century, one franchise was granted for a short line in Brooklyn with three cents as the maximum fare for adults, and this line has been operated for nearly fifty years by the Van Brunt Street and Erie Basin Railroad Company without any change from the original rate of fare. In some franchises a double fare has been permitted on the so-called "owl" cars running after eleven or twelve o'clock at night. Comparatively early in the development of street railways, the practice of charging half fare for school children was started in some cities. It was not, however, until the consolidation of the originally separate horse-car lines and the general change of motive power to electricity, that any serious movement was undertaken to reduce the standard fare for adults below five cents.

As a matter of fact, the adoption of five cents as the cash fare was doubtless due in large measure to the convenience of that fare on account of the position of the nickel in our system of coinage. There has never been any determination of the cost of carrying street railway passengers that would justify the fixing of this particular rate of fare. For a long period of years falling prices, in conjunction with increasing traffic, tended to make this fixed charge highly profitable. During the past twelve or thirteen years, however, rising prices, increased tax burdens and multiplying expenses of

operation have tended to make the five-cent fare much less remunerative than it was formerly.

It is obvious from experience that an indeterminate or long-term franchise cannot safely fix rates of fare for the entire period covered by the grant. Inasmuch as the street railway business is a public service, it is not entitled to speculative profits and should not be subjected to speculative risks. The principle of the new Cleveland franchise, namely, that service should be rendered at cost, is the fundamentally sound one. Even with this principle as a basis, the problem of rates is a complex one. We have first to consider the advisability of a uniform flat rate or of a rate schedule differentiated according to distance, time, continuity, regularity or the purchase of tickets and the age or occupation of passengers. We then have the problem of establishing a rate or a schedule of rates that will be just to the operating company and satisfactory to the public at the beginning of the franchise period. Finally, we have the problem of determining how the rates shall be readjusted from time to time to meet changed conditions as they arise.

The zone system of street railway fares is not popular in America. Moreover, it is not consistent with the public purpose of a street railway system. It is a good rule that the rates of fare should be the same within the limits of any urban community for short rides as for long rides, and the same for continuous rides on two cars as for a continuous ride on one car. While it undoubtedly costs more to carry a man six miles on a street car than it does to carry him three, and while it unquestionably is more expensive to carry him three miles by two cars than it is by one, the public purpose of a street railway system demands that all portions of an urban community should be put upon an equal footing as regards the cost of local transit facilities. Uniform rates of fare with universal transfers are an essential requisite of a street railway system that is performing its public function. An argument is often made on the basis of the length of ride which it is possible for a man to take for a single fare. This is a misleading basis for the discussion of rates. The important thing from the standpoint of the operating company is not the distance which a person can ride for one fare if he wants to, but the distance that he wants to ride for one

fare and can. The fact that only a five-cent fare is charged from the city limits on one side of town to the city limits on the other is of no practical significance, when as a matter of fact nobody wants to ride between those points. If we omit exceptional cases, where a popular resort is situated at one extremity of a city, thereby inviting many visitors from the opposite side of town, the significant question relates to the distance from the business center to outlying resident sections that may be reached for a single fare.

Because of the inconvenience of making change where a cash fare other than five cents is charged and also because cities frequently desire to levy a tax upon transients for the use of urban facilities, a difference is often made between cash fares and ticket fares. Cash fares even under low fare franchises are almost universally five cents. Where tickets at reduced rates are sold, the benefit of the lower fare is almost everywhere limited to those who are able and willing to invest at least twenty-five cents at a time for transportation facilities. Sometimes the low rates can be secured only when a person is willing to buy a dollar's worth of tickets. Indeed, companies have been known to offer 100 tickets for four dollars on condition that the thrifty citizen desiring to purchase tickets call at the company's office to secure them. It is obvious that if the five-cent cash fare is retained, practically all transients will be compelled to pay it. But in trying to hit the strangers, the city also hits those of its own citizens who are least able to pay high car fares. There are a great many people in every important city who frequently find themselves without even twenty-five cents in cash which they can afford to spend for car tickets. These unfortunate persons are, therefore, subjected to the proverbial lot of the very poor, who are always compelled to pay at a higher rate for their little than the well-to-do have to pay for their much. The convenience of the five-cent cash fare from the standpoint of making change is so great, however, and tends so much to facilitate the handling of passengers, that it should be retained unless the average rate established is far below it. The purchase of tickets, however, at the reduced rates should be made as easy and convenient as possible. It is preposterous that a citizen should have to visit the company's office to get tickets or even should have to buy them at

stations distributed in different parts of the city. Tickets should be on sale on all passenger cars at all times while they are in operation. Moreover, they should be for sale in small lots as well as large ones so that a person having ten or fifteen cents will be able to invest in tickets as well as a person having five dollars. If tickets can be sold at the rate of ten for a quarter, they should also be for sale in batches of two for a nickel or four for a dime. If they can be sold at the rate of twenty-five for one dollar, they should also be available at the rate of six for twenty-five cents. If seven tickets can be sold for a quarter, there is no good reason why three may not be had for eleven cents.

It is reasonable that children in arms and perhaps all children under five or six years of age attended by an older person should be carried free. It is also reasonable that children between the ages of five or six and twelve should be carried at half rates. It might even be admissible to give half rates to school children, but certainly with this last concession we have reached the limit of differentiation in rates of fare that should be permitted. The custom of selling tickets at reduced rates for working men or selling working men's tickets to anyone who asks for them, is neither just nor beneficial. There is some reasonable ground for permitting a company to charge a double fare during the hours between midnight and five o'clock in the morning, on the theory that it is good public policy to discourage travelling at that time. It is the time when street car operation and all other disturbing movements should be reduced to a minimum, and there is no particular reason for not penalizing late revelry by requiring double street car fares in the wee, small hours of the night. In the case of special classes of people whose work requires them to use the cars at this time, the rate of compensation for work at odd hours will naturally have to be fixed with reference to the additional expense entailed by the exceptional conditions. If a ten-cent fare is charged on the "owl" cars, those persons who are compelled to use them regularly will undoubtedly in the long run receive the additional compensation required to meet this extra expense. When we come, however, to the question of a reduced fare during the rush hours, the arguments in favor of a reduction are inconclusive. While it is true that strap-hangers

are carried at less cost than seated passengers and that persons who have to stand on the running-board or ride on the roof of the trolley car, get service that is worth less to them than a comfortable ride would be, it is nevertheless true that a reduced fare during certain rush hours tends to congest traffic and render adequate service even more difficult than it is under normal conditions. It is the better policy, instead of trying to secure reduced fares at the rush hours, to insist upon the operation of a large number of cars for the sake of better service. It is precisely those persons who travel during the rush hours who can least afford the expenditure of vital energy required by street car travel under trying conditions. It would be more in accordance with good public policy to give a reduction of fares during the non-rush hours and induce shoppers and other persons who have control of their hours of travel to avoid the times when the necessary demand upon the street cars is greatest. In connection with the Coney Island fare cases before the New York public service commission, this principle has been urged with considerable force as a justification of a ten-cent rate on Saturdays and Sundays and a five-cent rate during the other days of the week. Any differentiations from a uniform flat rate good for all people at all times for all distances within the city limits, are to be justified not by theories of differences in the cost of service under different conditions, but upon the theory that the whole rate schedule should be fixed so as to bring in the necessary income, while differentiation, if any, should be made for the sole purpose of improving the service and furthering the ends for which the street railway system is clothed with public functions.

There remains the question of free service to special classes of public employees, such as policemen, firemen and mail carriers. The practice of requiring such free service is well-nigh universal, and in many cases the companies voluntarily extend the system by granting pass books to aldermen and administrative officials. The pass system, except for employees of the road engaged in business connected with operation, is unquestionably bad. The question as to whether uniformed public officers or employees should be carried free while on duty is merely a question of convenience to the agents of the government and of compensation by the com-

pany for its privileges. It seems best, however, to cut out entirely this system of free transportation. If the city desires to furnish transit facilities free for its agents, it can do so by furnishing them street car tickets at the regular rates. A public utility should not be required or permitted to carry a lot of deadheads. Its gross income should represent the price of the full amount of service rendered. It is only on this basis that service and rates can be regulated with justice to all parties. Therefore, let everybody pay except those who are actually engaged in the maintenance and operation of the railway.

In accordance with the principles already set forth the original rate schedule should be fixed in the franchise so as to allow an ample income for adequate service, the maintenance of the property at the highest feasible standard of efficiency and a reasonable return upon capital actually invested in the enterprise. It is obvious that this cannot be done except on the basis of accurate information as to the amount of capital invested or to be invested in the property and the amount of traffic that may reasonably be expected. Where it is a case of the renewal of a franchise, the necessary facts ought to be available. If it is a new enterprise, however, estimates of costs and earning power can only be based upon experience in other cases. The Cleveland scheme of setting forth in the franchise a series of rate schedules and providing for the automatic readjustment of rates from time to time in accordance with the financial experience of the enterprise, is simple and correct in principle. The mistake should not be made, however, of providing so eagerly for lower fares that the margin of income required for improvements in service will be lacking. Indeed, the inconvenience arising from frequent readjustment of rates is so great as to justify longer periods of experimentation than the Cleveland franchise allows. Even automatic changes in rates should not be permitted to go into effect oftener than once a year and possibly not oftener than once in two or three years. Readjustments by rate regulation or arbitration, if made once in five years, will come near enough together for practical purposes. The importance of low fares as compared with good service has frequently been over-emphasized. Nothing can be more fatal to a street railway, both from the standpoint of the company

operating it and from the standpoint of the public, than to get the fares too low. If they are a little higher than necessary, the surplus can easily be used to advantage in extensions, the improvement of the service, the enlargement of the reserve fund, or the amortization of the investment. A good street railway franchise will be so drafted as to prevent the operating company from absorbing the surplus that may result as an incident of a rate schedule that is a little too high. What angers the people is that a private company enjoying a monopoly, should be able by virtue of a special privilege tax to reap exceptional profits from a rate of fare arbitrarily fixed. The benefits of a monopoly that involves the fixing of more or less arbitrary rates, should in all cases accrue in one form or another to the public.

304. Supplementary sources of income: advertising; carrying mail, express and freight; chartered cars.—The primary business of a street railway is to carry passengers. Nothing should be permitted to interfere with the highest attainable efficiency in the performance of this function. Where the cars and tracks can be used, however, for the performance of supplementary services without impairing transit facilities, a double advantage accrues from such use. In the first place, it is in accordance with good public policy to use to their maximum capacity and for as many services as possible, the fixtures that occupy the streets. In this way the maximum of public advantage may be derived from a fixed amount of inconvenience. In the second place, the development of a supplementary income, even though it be comparatively small, is for the benefit of the business as a financial venture. It is manifestly improper, however, to permit the company to absorb this additional income as so much "velvet." All income from operation should go into the common fund and the net benefit should be reserved to the public.

One of the important supplementary sources of income is advertising. No franchise should permit a company to transform its cars into moving billboards, but the use of a moderate amount of space on the inside of the cars just under the transoms for advertising purposes is all right. But the character of the advertisements admitted to the cars should be subject to public censorship fully as stringent as that exercised over billboards. It is not tolerable that public con-

veyances should be used for immoral advertisements or for modes of advertising grossly offensive to the aesthetic sense. Moreover, the city should reserve the right to use, free of charge, a certain amount of advertising space for important public notices and proclamations, notably those referring to elections and health administration. The franchise should also require the company to use sufficient space for posting time, rate and route schedules and any other notices regarding the operation of the road which may be of public interest. The company should not be permitted to take up good advertising space for the exploitation of its quarrels with the city or for the one-sided presentation of franchise issues.

The carrying of mail on the regular cars or the operation of special mail cars may be of some convenience to the public and to the post-office department under favorable conditions. In Grand Rapids, Michigan, and perhaps in other cities, each car has a United States mail box attached to its exterior, and a citizen may stop the car at any street crossing to deposit a letter. At the business center, where most of the cars pass a common point, a postal employee stands between the tracks and collects the mail from the boxes as the cars pass. This street car mail service is in addition to the usual service in connection with fixed mail boxes located at numerous street corners. It is said to have been established as a means to protect the company from strikes. In leisurely towns with a widely scattered population, this street car mail service may be justified. No city of 100,000 people, however, should tolerate such a system. It is wholly undesirable that a citizen should have the right to stop a crowded car for the purpose of mailing a letter, or that cars should be held in the most congested traffic center while postmen are unlocking mail boxes and locking them up again. The operation of independent mail cars to transmit mail in large quantities from the central post-office to substations or to and from railroad depots may facilitate the business of the department without appreciably interfering with street railway passenger service. The most serious complication from this source is the added danger arising from the operation at high speed of special cars through crowded streets. A street railway franchise should permit the company to carry mail, but should reserve to the city the right to pass upon the mail-carrying contracts in

advance, and should limit to a short term the period for which any such contracts may be made.

The most serious question relative to the development of supplementary sources of operating income arises, however, in connection with the handling of personal luggage, express packages and freight. Public convenience unquestionably requires that passengers should be permitted to carry hand luggage with them on the cars. There are so great variations, however, in the capacity of different individuals for attaching parcels to their persons that injustice is sure to be done unless an extra fare is charged for luggage in case it is so bulky as to take up the room of an additional passenger. Whether poodle dogs and baby cabs should be permitted on the cars sometimes becomes a burning question. So far as baby cabs are concerned, the problem might be solved by admitting those of the folding variety free except at the rush hours, and by charging an extra fare for them then. So far as poodles are concerned, they should pay their fares the same as other individuals, young ones and very small ones being carried for nothing.

The carrying of express packages on regular passenger cars is not to be tolerated, and indeed there is no satisfactory reason for permitting the operation of special express cars for purely city business. On interurban lines, however, it is practically necessary that combination passenger and express, or special express and light freight cars should be operated. These cars must usually be admitted to the heart of the city by way of the regular street railway tracks. Loading and unloading in the streets should not be permitted, however. Inasmuch as the heavy express cars add considerably to the wear and tear of the tracks, a street railway company should receive a substantial income from them. Moreover, they should be confined to the use of as few lines as possible so that the inevitable annoyance to abutters and to the public generally from the operation of the heavy cars may be minimized. A street railway franchise should forbid the operation of local express cars, but should require the company to receive interurban cars of this character subject to special rules and regulations as to routes, operation and compensation, to be fixed by the proper city authorities.

The use of street railway tracks for the handling of ordi-

nary freight is permitted under some franchises. In Brooklyn, freight cars are operated through the streets day and night. There appears to be nothing in the companies' charters and franchises to prevent them from developing the freight business on a par with the passenger business. This is unfortunate. Freight hauling on street railways should in any case be strictly subordinated to the convenience of the travelling public. The situation in Brooklyn is somewhat relieved by the fact that spur tracks for the private use of factories and stores cannot lawfully be maintained in the streets. It is desirable that the city should reserve the right to use the street car tracks for the transportation of materials used in the construction and repair of streets in special cars and should permit the company to convey in like manner the materials needed in connection with the construction and maintenance of tracks. Such materials should not be conveyed through the streets, however, during the hours of congested passenger traffic. The advisability of using street railways in the night for switching ordinary freight cars is a mooted question. Quietness in residence districts during the night is so important a desideratum that the use of street railways there for extra night operation is hardly to be permitted until some practical plan for muffling the noise is devised. In strictly business districts and in the neighborhood of steam railroad tracks, the case is somewhat different. Noise in the night is less troublesome and at the same time the use of the street railway tracks for switching purposes would be a greater convenience. Mayor James Logan, of Worcester, in a recent public address discussed this matter in a very suggestive way.[1] His remarks are so much in point that I shall quote him at some length.

"One of the most difficult problems confronting railroad management," said he, "is that of providing suitable additional freight terminal facilities in the larger cities. In many cases the price that would have to be paid for the land would make it prohibitory. In other cases it is not a question of price; the land simply cannot be acquired.

"This lack of freight terminal facilities is one of the severest handicaps on business. As cities have grown larger the factories are situated at a greater distance from the freight terminals, thereby necessitating long hauls for freight, and in these days when profits in manufacturing

[1] Inaugural Address of Hon. James Logan, Mayor of Worcester, Mass., January 6, 1908, pp. 20–22.

are figured by decimals, even small and seemingly trivial handicaps have to be carefully considered.

"Steam road spur track facilities for manufacturing plants and commercial enterprises are at a premium, and with the elevation or depression of the railroads to eliminate grade crossings in our cities, in many instances spur track facilities cannot be obtained at all.

"I have the notion that before many years the trolley system would overcome this handicap of lack of spur track facilities and congestion at the railroad freight terminals. Bear in mind that the trolley systems are standard gauge, and the merger of steam and trolley roads for freight and express business seems to be a most natural step in the evolution of transportation.

"Spur tracks could be run from the trolley systems into the yards and buildings of commercial plants, cars would be loaded and unloaded on the tracks during the day, and at night, before the factories close, the railroad freight office would be advised by the different factories of cars that were ready to go forward, and after midnight, when the passenger traffic had all been cared for, the electric switcher, which is noiseless compared with the locomotive, and which carries its own light, so that it can work as well at night as in the daytime, would take these loaded cars to freight yards on the outskirts of the city, where land can now be acquired at a low price and in sufficient quantities to provide for future growth, and there is where the trains would be made up. This refers to solid carload business, which would thus never go near the freight houses, the cars going direct from the factories to be made up into trains In this same manner the less carload business could be handled from the factories to the freight houses. The trolley line would give each day to those firms, the volume of whose business would warrant their so doing, an empty car for their mixed shipments or less carload business. At the end of the day they would take this car to the freight houses on the outskirts of the city for distribution to points of shipment.

"The electric switcher having cleared the tracks would then set in position on the spur tracks the empty cars for the next day's business. This process would simply be reversed on all inward freight, such as raw material, coal and other supplies.

"This would simply mean that the trolley line would eventually do a large part of the trucking business of the city, the same as transportation companies do now in many cities, with this exception: instead of making a half dozen trips during the day with horses, they would make one trip at night by trolley.

"By this method of handling freight the congestion at freight house terminals would be relieved, as a large proportion of the freight would then be loaded and unloaded at the manufacturing plants, and the expense connected with loading and unloading solid carloads would be borne by the factories instead of, as it now is, by the railroads, and the saving to the railroads would probably amount to more than the cost of switching, so that the railroads might well afford to do the switching for nothing (whether they would or not, would be another matter). But that is a subject which would be well worth considering when granting the franchise and, as I said before, the proper time to attach conditions to a public service franchise is when it is granted.

"This would relieve the congestion at the freight yard terminals, for whereas, under present conditions, the loaded cars must be held to be

made up into trains in the congested freight yards adjacent to the freight houses, under the conditions suggested, as soon as cars were loaded, they might then be started for the yard on the outskirts of the city, and right at this point is the reason why the city ought to have a say as to the hours during which this work might be done, and over what streets the cars might be run.

"This would also relieve street congestion, for every car loaded on the tracks at the factories would mean just so much less freight hauled through the streets. To transport a carload of ordinary merchandise would require five or six two-horse wagons, which would take up much more street space than the trolley car, and while in transit the wagons would probably occupy the street three or four times as long. It is this heavy teaming which wears out our streets, and if this teaming was transferred to the trolley rails, this change would be quite a factor in the cost of street maintenance."

In Seattle, where freight-handling has been developed as an important feature of the street railway business, the results have not been altogether good. Referring to this matter in his annual report for the year ending November 30, 1909, Mr. A. L. Valentine, superintendent of the city's department of public utilities, had this to say:

"Considering the interference that the freight service of street railways is beginning to cause in the operation of passenger traffic, the high rates charged, and the unsatisfactory results achieved, as well as the increased risk in travel, one is almost led to believe that if the companies do not see the necessity for better regulation of this traffic, it would be good public policy to impose more stringent regulations upon the freight service, especially on single track lines subject to heavy traffic."

It is perhaps sufficient to suggest the rule that a street railway franchise should not prohibit the use of the tracks by freight cars, but should subject such use to regulation from time to time by the city authorities.

The operation of funeral cars, observation cars and other cars for use on special occasions at special rates should be permitted, subject to municipal regulation.

305. Publicity: prescribed forms of accounting; investigations; reports; filing of documents.—No adequate control over the operations of a street railway company can be exercised by the public authorities without publicity of the company's financial transactions. Substantially the only publicity required in franchise grants up to a few years ago related to gross receipts in connection with the requirement that a certain percentage of such receipts be paid into the

city treasury. Indeed, the intricacies of corporate bookkeeping were regarded as being so baffling as to render any scheme for compensation based on net earnings wholly impracticable. The city's accountants were not considered equal to the task of unravelling the subtle mysteries of corporation finances and, moreover, publicity of accounts was looked upon as an interference with the prerogatives of a private business. But the elimination of competition and the demonstration in a hundred ways of the public nature of the street railway business have overcome, to a great extent, any popular scruples about the justification for enforced publicity. There is no rational basis upon which the terms of a franchise can be arranged except full knowledge of the financial aspects of the business. The city must know all about construction cost, income, traffic, operating expenses, costs of materials and maintenance, renewals and accident burdens. There is nothing at all in the financial transactions of the company that can properly be concealed from the city's eye.

In order to insure correct and detailed accounting, not only publicity but control is necessary. In states where there are public utility commissions with adequate powers, the active control of street railway accounting should be left to them. In every franchise grant there should be imposed on the company, however, the obligation to keep its books according to standard forms, and the city should reserve the right to take any necessary steps to bring this about in the absence of effective state action.

Just what publicity of accounts implies should be made clear. It is not necessary that the general public should have continuous access to the company's books. It is essential, however, that the city's financial officer, the mayor and the city council should be authorized at any time to examine directly or by properly qualified accountants all the company's books, records and vouchers to the last detail. Moreover, there should be no restriction upon the fulness of the reports that may be made public as a result of such examinations. The right to examine the company's books should also be guaranteed to stockholders and bondholders and to groups of citizens who can show good cause for their proposed action, and can secure a writ from a court of proper jurisdiction with a reasonable guaranty that they will not unnecessarily

interfere with the conduct of the company's regular business while the examination is going on.

The franchise should provide for the making of annual or more frequent reports to the city, showing income, expenditures, assets, capitalization and traffic in detail. If reports to the state are required under general or special laws, the reports to the city should be made out for the same fiscal periods and should follow the same general plan, though greater elaboration and definiteness, if thought desirable, may properly be required. The reports should contain all essential facts necessary to show the status of the business and provide a basis for interest allowances, rate readjustments, purchase of the property, and extension and service requirements.

Street railways often sustain more or less secret relations with each other or with other public utilities. Sometimes by secret contracts with nominally independent concerns, which, however, are controlled by the same persons who control the street railway, excessive costs of materials or power are carried on the books. Copies of all contracts and agreements made by the street railway company, whether with its employees or with other companies or individuals, should be filed in a public office. All agreements for leasing, joint operation, trackage rights, power supply, or other matters affecting operation under the company's franchise should be subject to approval by the proper city authority.

306. Capitalization and valuation of property.—The direct control of capitalization is usually considered to be a state rather than a local function. Very few municipal franchises contain provisions for the control of street railway stocks and bonds. Even the Chicago and the Cleveland settlement ordinances do not attack this problem directly. They limit capitalization only by establishing a valuation of the property at which it may be purchased at any time and upon which the company is allowed a fixed rate of return prior to purchase. The Cleveland franchise also provides that new capital stock shall not be issued below par and new bonds shall not be sold below par without the city's consent.

The par value of street railway stocks and bonds should not represent more than the actual original investment in the property plus new capital expended for additions and betterments. This is the maximum. There should be no

capitalization of franchises except to the amount originally paid to the city in lump sums for the grants. It is proper that interest on investment during construction and legitimate promotion and organization expenses should be included in construction costs. There should be no allowance for good will or the development of the business, as it is a monopoly service that is involved. The franchise should be drafted with a view to reversing the natural tendency of public utility companies to expand their capitalization. If the controlling motive is to be the rendering of the best possible service at the lowest practicable cost instead of the exploitation of a public service for the greatest possible private gains, every reasonable measure must be taken to reduce fixed charges. It is the view of some people that the public is not vitally interested in the amount of stocks and bonds issued by a public service company. They say that the public's only concern lies in the valuation of the property and the determination of the amount of investment upon which the company is to be allowed interest out of earnings. In a certain sense, this is true. Yet the analogy between the stocks and bonds of a public service corporation and the bonds of the city itself is so close that the same principles should apply to both. The par value of capitalization should in the first place be as nearly as possible the same as the amount of the investment, and the market value of the stocks and bonds should not thereafter be permitted to get far away from the par value. A franchise may appropriately stipulate that a street railway company's stocks and bonds shall not be issued for less than par value, and that the proceeds shall be used only for legitimate construction and betterment expenditures. All street railway bonds should be sold subject to redemption on any interest day at a stipulated premium. It should be provided that bonds outstanding when the property is taken over by the city or the city's licensee shall either remain a lien against the property until due or be transferred to the proceeds of the sale, at the option of the purchaser of the street railway system. Under usual conditions it is desirable that the proportion of capitalization to be issued in the form of bonds should be limited to one-half or at the most, two-thirds of the total. Any regulation of the comparative amount of stocks and bonds to be issued

is made less important, however, by the establishment of a fixed valuation of the property and the strict regulation of the uses to be made of earnings so as to make stocks and bonds almost equally certain to bring a fixed return.

As a means for controlling capitalization and advising investors as to the security of street railway stocks and bonds, there is much to be said in favor of fixing the purchase price of the property in the franchise itself, provision being made for additions to the price from time to time on account of extensions and betterments. In renewal franchises, where in most cases no satisfactory figures of original investment can be made up, a special valuation will have to be made, which may be based upon cost of reproduction less depreciation. If under the particular circumstances of any individual case it is deemed necessary to include any values of unexpired franchises or any costs of obsolete equipment, or any other item that would not properly enter into conservative capitalization in the case of new construction, it is imperative that provision be made for writing off all these extra items out of earnings within a reasonably short period. The dead capital should be eliminated and the water should be squeezed out, absolutely all of it.

307. Disposition of earnings: operating expenses, accidents, insurance, maintenance and depreciation.—It is the risk of a public utility enterprise that it assumes the imperative obligation to render good service whether it is being operated at a profit or not. This risk is softened in a good street railway franchise by a provision for elasticity of rates. The laborer is worthy of his hire, but he must work first, and get his pay afterwards. No control of a public utility is adequate unless it includes the control of the disposition of earnings. Obviously, earnings should be devoted, first, to the payment of necessary operating expenses, which include many things. There are the cost of power; the wages paid to conductors, motormen and laborers; the salaries of the administrative force; office expenses; legal expenses; the cost of materials and supplies, and all the other things that enter into the necessary expenses of rendering continuous, high-grade service, after the plant has once been constructed. There are certain special items properly included in operating expenses, such as insurance and damage claims, which are

sometimes unduly neglected or postponed. The company's "army of defense" is often able to keep settlements for personal injuries a year or two in arrears so that if the road becomes bankrupt claimants are likely to lose their money. There is nothing so despicable in street railway finance as the attempt to postpone or evade the payment of just claims on account of accidents. In view of these facts, the franchise should require the setting aside out of earnings of a certain percentage, or a lump sum, the amount to be readjusted from time to time, to be used exclusively for the settlement of damage claims. The franchise should also require the company to carry adequate insurance on its cars, car barns, power houses and other insurable property, the premiums to be paid out of earnings.

Taxes are ordinarily regarded as one of the primary items of expense chargeable to earnings. In so far as commutation taxes levied in lieu of paving repair and other current street obligations are concerned, they are a natural element of operating expenses. This is also true of taxes levied for state and county purposes. It is doubtful, however, whether general franchise and property taxes for city purposes should be considered a primary element of street railway operating expenses. Inasmuch as the street railway plant is devoted to a public purpose, with private operation on the principle of limited risk and limited profit, there is no controlling reason why such tax burdens should be taken out of earnings before interest allowances on investment are paid.

After the payment of all operating expenses, including damage claims and insurance premiums, there should be set aside a fixed minimum percentage of earnings or a fixed amount per car mile operated for maintenance, repairs and renewals. When a new plant is first put into use, these expenses are at a minimum. If nothing is put aside in a maintenance and renewal fund, the time is sure to come after a few years when the accumulation of deferred maintenance will become a heavy burden upon earnings and may even cause the road to go into bankruptcy. At any rate, the absence of such a fund and the gradual deterioration of the property will inevitably lead to inferior service and give the business a precarious financial standing. On the theory that

a bird in the hand is worth two in the bush, many street railways have declared high dividends while they were neglecting maintenance, until the continuance of this policy of exploitation became impossible and complete reorganization became necessary. The franchise should guard against such neglect.

With the best of maintenance a street railway plant in use inevitably falls below par as measured by the standard of new construction. It is considered impracticable to maintain a system at more than from 70 to 80 per cent of its cost value. In other words, depreciation is inevitable. There is also an irregular decrease in value on account of obsolescence. At periods when experimentation is active and rapid progress is being made in the development of the street railway art and its appliances, depreciation on account of parts of the equipment going out of date is rapid. It is necessary, therefore, to require the establishment of special funds to take care of ordinary wear and tear and obsolescence. Depreciation charges should be paid before interest on investment; for the reason that in the management of a permanent utility plant the first duty is to maintain the investment intact out of earnings. Practical considerations, however, may require that the inevitable depreciation of from 20 to 30 per cent of the value of a new plant shall be taken care of by amortization charges after the entire capital has been permitted to secure a fixed annual return.

308. Interest on investment; amortization; division of surplus profits.—The days of unlimited profits for investors in street railway securities are past. There is no business with a more certain earning power than the street railway. The excuse for speculative investments in street railways, if there ever was any, has long since disappeared. With the assumption of strict control by the city over the construction, operation and financial transactions of the railways, there has been necessarily assumed a public obligation to protect legitimate investments and to guarantee a moderate but certain return upon capital. Every street railway franchise should fix or provide the means for fixing the amount of the capital investment, and then should fix the rate of interest to be paid out of earnings on that amount. While operating expenses come first, there should be no uncertainty about

enough being left to pay this interest. It is sometimes required in laws authorizing municipal ownership that, in case the city undertakes to own and operate a public utility, rates shall be fixed high enough to pay operating expenses and take care of the capital invested. It is often urged that no city desires to get service at less than cost and that under municipal ownership the citizens will have to pay no more and no less than enough to make the enterprise self-sustaining. There is no reason why the same principle should not apply under a model franchise. It is desirable, therefore, that one of the principles recognized in the Chicago and Cleveland ordinances should be embodied in a comprehensive grant. Whatever may be done with surplus profits, a preliminary return of, say, five or six per cent should be guaranteed on capital actually invested in the business. There is no excuse, however, for a higher guaranteed return than six per cent. Probably five per cent is high enough. In speaking of a guaranteed return to capital, I do not refer to an absolute guaranty such as the guaranty of interest on general municipal bonds, but rather to the assurance that the city will refrain from exacting such compensation or fixing such rates as will make it impossible for the company to earn the specified minimum return on its investment.

We are next confronted with the problem of amortization. There is no good reason why a street railway should not pay for itself. Municipal bonds, even though issued for water works purposes, are amortized. Experience shows that a growing city's needs grow even faster than its population or wealth. Every year some new improvement or some costly reconstruction becomes necessary to the public welfare. For this reason it is very unfortunate to have the outstanding capitalization of public utilities always increasing and none of it being paid off.

The necessary increase of municipal debts makes the possibility of municipal ownership of the street railways more remote every year, unless provision is made for the gradual reduction of their outstanding capital account. The policy of requiring public utility companies to turn their plants or at least their street fixtures over to the city without cost at the end of a fixed period has been condemned by the experience of many cities, particularly in the Old World. There is

reason to believe, however, that this policy, like the sharing of net earnings, has failed in spite of its theoretical soundness because of the failure of the city to maintain continuous control of the company's financial operations. If an adequate fixed percentage of earnings is set aside every year for maintenance and renewals under a good franchise, the company will have no effective incentive to let its property run down toward the expiration of the grant. Indeed, the new principles of control established by the Chicago ordinance are assumed to be so effective as to justify the fixing of the purchase price at the time a franchise is granted. This could not be thought of unless adequate means had been discovered to prevent the deterioration of the property while in private hands. Provisions for the amortization of street railway investments may be made in one of two ways. Either the company may be required to establish a fund which with its accumulations will be sufficient to wipe out the entire capital, or that portion of it represented by street fixtures, within a specified period, when the property is to be turned over to the city for nothing, or the company may be required to pay annually into the city treasury a sum sufficient to build up a purchase fund with which the city can acquire the property at some future time. Chicago provides for the payment into the city treasury of fifty-five per centum of the surplus profits after operating expenses and a fixed return upon investment have been paid. These payments to the city are to be accumulated as a sinking fund for the purchase of the street railway properties, unless the city concludes at some future time to commute its share of profits for a reduction in fares. This provision for amortization is altogether too uncertain. A model franchise would require the payment of a prescribed percentage on capital or a fixed contribution every year for amortization purposes before there were any surplus profits for anybody. Indeed, strictly speaking there should be no surplus profits. The Cleveland franchise is drafted on the theory of doing away with them entirely by an automatic readjustment of fares from time to time. On the other hand, it is sometimes urged that so long as the city depends on private enterprise to build and operate the street railways, it will get better service and more substantial benefits in the long run by holding out to the operating company the hope

of earning an extra profit as an incentive to economical management. But it may also be urged that the operating men are responsible for the skillful management of the business and, therefore, should have this share of the profits, to be distributed among them in accordance with special merit. Just in so far as the risk of loss has been eliminated, the investors lose their claim to extra profits. A plan by which, say, twenty-five per cent of the annual surplus would be turned over to the stockholders, twenty-five per cent would be assigned to the active officers and employees of the road and the balance would be credited to the city to be kept in a separate sinking fund to provide for the ultimate purchase of the property, or, under proper safeguards, to be turned into the company's amortization fund to effect the same purpose in another way, would meet the demands of justice and would at the same time preserve the incentive for efficient operation with all proper economy.

309. Supervising authority to approve plans, hear complaints, audit accounts, certify expenditures, inspect equipment, etc.—No matter how elaborate the provisions of a franchise or of regulating ordinances may be, they will not avail to insure good service at cost unless there is someone to see that these requirements are complied with. It is one of the penalties of introducing private enterprise into the construction and operation of public utilities that a constant and keen-eyed supervision must be exercised to compel a company, with only private motives behind it, to act as if it had only public motives at its back. It is a thankless task and requires tireless watchfulness and energy. Until within very recent years cities depended on the city council, the mayor and the city attorney for the enforcement of franchise and ordinance obligations. These authorities were not qualified for this particular work in any special way and as a rule they were outwitted by the bright men on the company's side who received much higher pay and had a much more enduring tenure. In some states public utility or railroad commissions have been created with power, among other things, to enforce franchise obligations. But their interest is primarily in matters of state-wide importance, and they do not trouble themselves very much with the enforcement of the provisions of local franchises. There have also been estab-

lished in a number of cities in very recent times local public utility commissions or departments with certain supervisory control over street railways, along with other utilities. This movement is very promising, although as yet quite inadequate powers of supervision have been conferred upon these newly created authorities. The Chicago and Cleveland franchises are in this respect, as in many others, far in advance of all preceding American street railway grants. In Chicago there has been established a board of supervising engineers with extraordinary powers, especially over construction and financial operations. This board is a neutral body, the chief engineer having been agreed upon in advance and named in the ordinances, while the other members of the board are appointed by the city and the companies respectively. In Cleveland a city street railroad commissioner appointed by the city has full powers of investigation in all accounting and operating matters. His salary and the expenses of his office are paid by the company out of earnings. He also checks up all construction propositions and inspects the work when it is being done. He has very little final authority, however, as he is required to report most matters of importance to the city council for final determination, and in many cases the company may appeal to arbitration.

Every city with a population of 100,000 or more should have a separate department of public utilities headed either by a commissioner or by a paid board. This department should be required to inspect the company's plans of construction, supervise its accounts, hear complaints in regard to service, recommend rate adjustments, inspect equipment, see that franchise obligations are complied with, and, in brief, do the things which the city reserves the right to do in the franchise as well as the things it has the right to do under the police power. The functions and authority of this department should be recognized in every franchise grant, and in the absence of such a department created by charter or special ordinance, the franchise grant itself should establish it for the control of the street railway business.

310. Obligations to employees: protection, hours of work, wages, arbitration of labor disputes.—The interest of the general public in the relations between a street railway com-

pany and its employees as well as in the character and skill of the employees themselves has already been discussed in a section of the preceding chapter.

"The public has a right to demand uninterrupted street railway service," said the Chicago Street Railway Commission of 1900.[1] "To that end, it has the right to insist that everything reasonably possible be done to prevent strikes and lockouts. Companies, in accepting grants, should be required to submit all labor disputes to arbitration."

Very few American franchises thus far granted, however, contain a labor clause of any importance.[2]

In a few cases the number of hours constituting a day's work have been limited. The safety of the public requires that street railway conductors and motormen should not be compelled to work such long hours as to drop below a high standard of efficiency. On account of the uneven distribution of traffic through the twenty-four hours, it is a difficult problem to arrange the shifts so that each man shall have a day's work in one continuous stretch. Even where the men are not required to spend more than a reasonable number of hours a day in the actual operation of cars, it often happens that their day is so broken up in the arrangement of car trips, that they are compelled to waste several hours in making connections. For this reason a street railway franchise may properly stipulate that the conductors and motormen shall not be required to work more than a specified number of hours each day and that all of the day's work shall be included within a single twelve-hour period. As a part of the provision of adequate equipment, a franchise should require the street railway company to adopt all necessary devices for the protection of its employees. The manner in which street car drivers were at one time exposed to the inclemencies of the weather, now seems shocking. All cars should be fitted with vestibules, properly enclosed during cold and stormy weather. Provision should also be made for the most modern devices for collecting fares. It is of great importance to the employees and to the public that every passenger should pay his fare and that all fares should be

[1] Report, p. 14.

[2] For a general discussion of this subject, *see* an address by Raymond V. Ingersoll on "Labor Clauses in Franchise Grants," published in *Municipal Affairs*, Volume 6, No. 4, Winter 1902-3.

properly registered and turned in to the company. The Cleveland franchise goes so far as to require the general installation of pay-enter cars.

The general public has no direct interest in the rate of wages of street railway employees except as wages enter in as an element of operating expenses and therefore affect rates or surplus profits. There is little danger that conductors and motormen will be paid too much. It is probably best, however, not to put in a franchise a specific wage schedule. A provision requiring the company to submit all disputes with its employees relative to wages, hours and conditions of work to arbitration, if the employees are willing, would go a long way toward supplying automatic means of regulating wages. It would also tend to keep the employees contented and thus prevent strikes. In providing for arbitration, in the absence of regularly established conciliation courts, the franchise may well provide for the appointment of one of the arbitrators between the parties by the city. It is certainly fitting that the city, representing the demand for continuous operation under safe conditions should be represented in the settlement of labor disputes. As a matter of self-defense, the public has a right to insist that strikes and lockouts be tabooed. Street railways are a public business. They must run.

311. Matters often over-emphasized: compensation, car licenses, forfeiture, competition, fixed termination of grant.— A model street railway franchise will be as conspicuous for the things it leaves out as for the things it contains. Many franchise provisions that become popular as a result of peculiar developments in the business at particular times and places, fail to justify themselves in connection with a thoroughly scientific, well-rounded franchise contract. If the theory of the model franchise advocated in the preceding sections is correct, it follows that the city should not lay emphasis upon large payments for franchise privileges or heavy taxes upon the street railway plant and franchise. It has been our aim to put the street railway upon the basis of a public service to be rendered at cost. We do not admit that street car riders should be mulcted for the purpose of reducing taxation. The excuse for requiring large compensation in the past has been that the companies were reaping excessive

profits from the use of public property. A model franchise would absolutely prevent such a condition and would reduce the value of the franchise as a special privilege practically to nothing. One of the next lessons to be learned in franchise granting, is the relative unimportance of compensation to the city.

The requirement that a street railway company should pay a car license fee has been wellnigh universal. The justification of it has been the same as that of an ordinary vehicle tax. If cabs should be licensed and taxed, then why not street cars? It is obvious that a large car license fee will tend to impair the service by keeping down the number of cars in operation. It will be admitted at once that this tendency is pretty sure to be in the wrong direction. The system of car licensing as a means of raising revenue is not to be encouraged; for the same reason that the practice of exacting compensation in other ways is subject to criticism. The licensing of cars, however, may be made useful if the fee is so small as not to discourage the use of an adequate number of cars and if the license issued at certain regular intervals and posted in the cars is issued only after a careful inspection and as a guaranty that the car on the date of the license is in thoroughly good repair and ready for street use.

A deal of space is wasted in franchises by elaborate provisions for forfeiture. Such provisions are almost always ineffectual and have little practical result except to lead the city and the company into endless litigation if forfeiture is attempted. It is good policy to require that a company shall construct its entire authorized route within a specified time on penalty of forfeiting its whole franchise, on the theory that the company has obligations as well as privileges. Such a forfeiture provision can be made simple and practically self-executing. The need of a general provision for forfeiture on account of failure to comply with any of the terms of the franchise is materially lessened by the reservation to the city of the right to terminate the grant at any time and take over the property for municipal operation, or to transfer it to another company. Many forfeiture provisions are not worth the paper they are written on, except to throw dust in the eyes of the people. Forfeiture is too drastic a remedy to be applied with success except in perfectly clear and simple

cases. It might perhaps be applied with success in cases of bribery, jury-fixing and similar crimes.[1]

Another thing that has been over-emphasized in connection with all public utility grants, including street railway franchises, is competition. It seems almost impossible for a city to get over the idea that competition holds out a promise of lower fare, better service or both. With all the experience American cities have had with competitive grants, we ought by this time to be able to see that competition is an artificial stimulant whose after effects are always disastrous. The secret of the long survival of faith in the competitive idea in connection with the operation of a public utility is the feeling of helplessness and distrust which the public, and to a considerable extent the public authorities, have about the effectiveness of governmental regulation. If we admit that the companies are stronger than the city and cannot be controlled, we are prone to hope for results from setting the companies on to fight each other. The plan does not work. It never has worked successfully. In the nature of the case it never can. The granting of a competitive franchise is in every case a confession of weakness and an invitation to future trouble. A street railway system can never be developed and operated on a rational basis at reasonable cost except as a unit and under stringent public control.

Another point in franchise granting that is often over-emphasized is the idea that a franchise should expire at a definite, predetermined period. This idea is especially faulty when it is coupled with neglect to establish the exact status of the company's physical property at the expiration of the franchise. If it is stipulated that the entire property shall revert to the city without cost, then the company at least has fair warning that it must recover its entire investment from earnings during the franchise period. If it is stipulated that at the expiration of the franchise the property shall be purchased either at its fair value at the time of purchase or at a valuation based upon original investment, the company can proceed to give good service at cost without having to

[1] The Committee appointed by Mayor Edward R. Taylor, of San Francisco, October 12, 1908, to report on the causes of Municipal Corruption, included among its recommendations the following: "Laws should be enacted for the cancellation of franchises procured by fraud or crime of the owners of the franchises, or of their predecessors in interest."

worry about its capital. As already urged in preceding sections, however, a street railway system should be treated as a utility having an indefinite future, not as an experiment that is to be closed out at an arbitrary date twenty or twenty-five years hence. If private operation is to be continued there is no reason why a franchise should come to an end at a particular time without reference to the character of the service being rendered by the company holding it. If the company is giving satisfaction, the city will be the gainer by having it continue in possession of the property for an indefinite period. If on the other hand municipal ownership and operation is to be undertaken, or if the company in charge is guilty of negligence or incapacity, there is no reason why the city should have to wait fifteen or twenty years for a remedy. With the indeterminate franchise, the city's control of the situation is continuous. This is a desideratum in connection with any public function.

CHAPTER XXIV.

STREET RAILWAY FRANCHISES IN GREATER NEW YORK.

312. The earliest street railway franchise in the United States.—New York and Harlem Railroad, "City Line."
313. Sixth Avenue and Eighth Avenue railroad franchises, 1851.
314. The first general street railway law in New York, 1854.
315. Privileges confirmed and obligations canceled by judicial interpretation.
316. Terms of the original Broadway franchise, declared invalid by the courts.
317. Franchise granting authority in New York City resumed by the Legislature, 1860 to 1875.
318. Right to purchase at cost plus annual interest at 14 per cent reserved in early franchise in Brooklyn and Jamaica.
319. Differential rates of fare under old Brooklyn City Railroad franchises.
320. Old steam roads, turnpikes and freight handling on street railways in Brooklyn.
321. General street railway law under constitutional requirement of local consents, 1884.
322. Sale of franchises at auction, 1886 to 1897, illustrated.
323. Limited franchises required and municipal ownership made lawful by the Greater New York charter, 1897.
324. Special franchise tax law, and percentage payments in New York City.
325. The standard form of franchises now in use adapted to a particular case.—The South Shore Traction grant.
326. General suggestions as to New York City's present street railway franchise policy.

312. The earliest street railway franchise in the United States—New York and Harlem Railroad, "City Line."—By a special act of the New York legislature passed April 25, 1831, the New York and Harlem Railroad Company was incorporated "with power to construct a single or double railroad or way, from any point on the north bounds of Twenty-third street to any point on the Harlem river between the east bounds of the Third avenue and the west bounds of the Eighth avenue" for the transportation of property and persons "by the power and force of steam, of animals or of any mechanical or other power or of any combination of them which the said company may choose to employ."[1] The pow-

[1] Chapter 263, Laws of New York, 1831.

ers granted were vested in the company for a term of thirty years. It was provided that, unless the road was commenced within two years and completed within four years, the corporation "shall thenceforth forever cease and this act shall be null and void." It was provided that the company "shall not take any lands without the consent of the owner or owners thereof exceeding forty feet in width from east to west and shall in case of their locating the route of the said railroad in or along any public street or avenue now laid out on the map or plan of the city of New York leave sufficient space in the said street or avenue on each side of the said railroad for a public highway for carriages and for a sidewalk for foot-passengers." The right to construct the company's railroad in or across streets in the city of New York was made subject to the consent of the city authorities by section 16, which was as follows:

"Nothing in this act shall be deemed to authorize the said corporation to construct or use their single or double railroad or way across or along any of the streets or avenues as designated on the map of the city of New York, whether such streets or avenues shall have been opened or not, without the consent of the Mayor, Aldermen, and Commonalty of said city, who are hereby authorized to grant permission to the said corporation to construct their said railroad or way across or along said streets or avenues, or prohibit them from constructing the same; and, after the same shall be constructed, to regulate the time and manner of using the same, and the speed with which carriages shall be permitted to move on the same or any part thereof; and nothing in this act contained shall prevent the Legislature from granting to any other corporation or persons the right of constructing a railroad or roads parallel with the one herein mentioned, or any part of it, on any lands, street, road, or avenue, not occupied by the railroad or way hereby authorized, or the right of crossing or intersecting the same at any point or points, without making compensation for injuries sustained thereby."

The company's legislative charter also specifically provided that no person who was at the time a member of either branch of the common council should act as commissioner or director of the company.

By another act passed April 6, 1832, the company was authorized, with the permission of the city authorities, to extend its railroad along Fourth avenue to Fourteenth street and through such other streets of the city as the local authorities "may from time to time permit, subject to such prudential rules as are prescribed by this act" and as the

common council might prescribe.[1] It was also specifically provided by this amendatory act that "no carriage or vehicle shall be drawn or propelled by any other than horse-power through any street of said city south of Fourteenth street" and that "every carriage or vehicle drawn or propelled on the said railroad shall be provided with suitable safeguards projecting in a descending direction to near the surface of the rails in front of each forward wheel, in such manner as to insure the greatest safety against accidents." The speed of cars on any street south of Fourteenth street was limited to five miles an hour.

Between the date of the company's charter and the date of the amending act just described, the company had selected a route and secured the consent of the city authorities by an ordinance approved December 22, 1831, and accepted by the company by an agreement executed January 9, 1832.[2] Under this ordinance the company was authorized to build a double or single track railway in Fourth avenue from Twenty-third street to the Harlem river, with a branch through One Hundred and Twenty-fifth street. The width of the double railway was not to exceed twenty-four feet. That the proposed construction of a street railway was experimental and that the city desired to keep control of the use of the streets, is shown by Section 2 of this ordinance, which was as follows:

"And be it further ordained, that if, at any time after the construction of the aforesaid railways by the said New York and Harlem Railroad Company, it shall appear to the Mayor, Aldermen, and Commonalty of the city of New York, that the said railways, or any part thereof, shall constitute an obstruction or impediment to the future regulation of the city, or the ordinary use of any street or avenue (of which the said Mayor, Aldermen, and Commonalty, shall be the sole judges), the said railroad company, or the Directors thereof, shall, on the requisition of the said Mayor, Aldermen, and Commonalty, forthwith provide a remedy for the same, satisfactory to the said Mayor, Aldermen, and Commonalty; or, if they fail to find such remedy, they shall, within one month after such requisition, proceed to remove such railway, or obstruction, or impediment, and to replace the street or avenue in as good condition as it was before the said railway was laid down; and, should the said Directors decline or neglect to obey such requisition, the said Mayor, Aldermen, and Commonalty may, upon the expiration of the time

[1] Chapter 93, Laws of New York, 1832.
[2] A Compilation of the Existing Ferry Leases and Railroad Grants made by the City of New York and the Legislature of the State for the Use of the Streets of New York City, compiled by David T. Valentine, 1866, page 197.

limited in each notice, cause the obstruction or impediment to be removed, and the avenues or streets restored as aforesaid, at the expense of the said railroad company."

This ordinance also provided that the right to regulate the company's motive power and the speed of its cars was reserved to the common council. It was also provided that the company should make its "railroad path from time to time, conform to what may hereafter be the regulation of the avenue and road through which said railroad passes." It was also provided that if the company failed to complete its railroad within the time limit set by its charter, or if at any time thereafter the railroad was discontinued or not kept in repair, "then the strip of land to be taken for the said railroad should be thrown open and become a part of the street or public avenue, without any assessment on the owners of the adjoining land or the public therefor."

These were the first grants from the state legislature and the local authorities for the construction of a street railway in New York City, and that the proposed railway was not expected to bear quite the same relation to the street through which it passed which the modern street railway bears is shown by a provision of the city ordinance requiring the company to construct stone arches and bridges for all the cross streets intersected by the company's embankments or excavations, which in the opinion of the common council needed to be arched or bridged for public convenience. There was also a provision that "a railing or other erection shall be made on the outer edges of the embankments or railroad path, and also such railing or fences on the edges of the excavations as the Common Council shall, from time to time, deem necessary to prevent accidents and loss of lives to our fellow-citizens."

By another resolution, however, approved by the mayor May 10, 1832, the company was authorized to extend its rails southwardly from Twenty-third street to Prince street, through certain enumerated streets.[1] This extension was to be subject to the conditions and restrictions previously imposed on the company with relation to its railroad above Twenty-third street. There were certain other specific provisions, however, which make it appear that this extension

[1] Ferry Leases and Railroad Grants, *already cited*, page 208.

was to be a real street railway in the modern sense. It was provided that the rails should be laid down in such manner and in such portions of the streets as should be approved by the street commissioner, "so as to cause no impediment to the common and ordinary use of the streets for all other purposes." The water courses of the streets were to be left free and unobstructed and the company was to pave the roadway in and about its rails for a width of twenty feet in a satisfactory and permanent manner and keep this portion of the roadway in repair. Under this franchise the common council had the right to require the company to remove the whole or any part of the railways authorized by this grant and to replace the streets in good condition. It was provided that the company should have a single track constructed over the authorized route by May 1, 1834, and that it was "to charge and receive such tolls, rates, or fare for the carrying of passengers or effects upon the said rail-tracks, south of Twenty-third street, as the said Common Council may prescribe." This franchise was accepted by the company by an agreement dated May 18, 1832.

By a resolution approved by the mayor December 14, 1844, the company was required to discontinue the use of steam power on Fourth avenue south of Thirty-second street on or before August 1, 1845.[1]

By a resolution in effect March 30, 1846, the corporation attorney was directed to "take legal measures to prevent the steam power of the Harlem Railroad Company from plying below Thirty-second street on the Fourth avenue as directed by the Mayor and Common Council in December, 1844."[2] By a resolution approved December 27, 1854, the use of steam on the tracks of this company in Fourth avenue south of Forty-second street was to be discontinued within eighteen months.[3] In the meantime, the company had been required by resolution approved August 8, 1850, to construct sustaining and parapet walls on each side of its tracks in Fourth avenue between Thirty-second and Thirty-fourth streets and between Thirty-ninth and Forty-second streets, and sustaining walls between Thirty-fourth and Thirty-ninth streets, and to arch over the railroad tracks between the streets just named.[4] A tunnel constructed under this resolution is still

[1] Ferry Leases and Railroad Grants, *already cited*, p. 208.
[2] *Ibid*, p. 209.
[3] *Ibid*, p. 223.
[4] *Ibid*, p. 213.

in use by the Fourth avenue line of the Metropolitan Street Railway company.

By an ordinance of the common council approved December 31, 1858, and confirmed by act of the legislature passed April 16, 1859, the company was authorized to use steam power on Fourth avenue as far south as Forty-second street, and the company's charter and franchises, which were about to expire, were extended for a period of thirty years.[1] By these same grants, an extension of the company's road from Forty-second street up Madison avenue to Seventy-ninth street, for the use of its small cars only, was authorized. These grants mark the final separation of the company's railway into two portions later known as the "steam line" and the "city line." The steam line extending through Park or Fourth avenue from Forty-second street north, now constitutes the main line of the New York Central and Hudson River Railroad Company and the New York, New Haven and Hartford Railroad Company entering the Grand Central station. The "city line," extending south from Forty-second street through Fourth avenue, the Bowery, Centre street and other streets to the Post Office, and extending north from Forty-second street through Madison avenue to and across the Harlem river, was leased to the Metropolitan Street Railway Company in 1896 and now constitutes one of the principal street railway lines of the city.

313. Sixth Avenue and Eighth Avenue Railroad franchises, 1851.—Twenty years after the granting of the New York and Harlem franchise the common council of New York City undertook to grant certain other street railway franchises without having been given specific authority to do so by the state legislature. Resolutions were passed June 4, 1851, approved July 30 following, and embodied in agreements with the grantees September 6, 1851, authorizing the construction of the Sixth and Eighth avenue railroads.[2] Under these resolutions, which were accepted by the companies, it was provided that double track railways might be laid by the grantees under the direction of the street commissioner, extending from the intersection of Chambers street and West Broadway north to Fifty-first street and

[1] Ferry Leases and Railroad Grants, *already cited*, p. 227; also Chapter 387, Laws of New York, 1859.

[2] Ferry Leases and Railroad Grants, *already cited*, pp. 249, 271.

Eighth avenue and to Harlem on Sixth avenue and continuing on both avenues to the Harlem river when required by the common council and as fast as the avenues were graded. The grantees were required in both cases to keep the roadway in repair between their tracks and for a space of at least eight feet on either side. No motive power except horses could be used on the Eighth avenue line below Fifty-first street, or on the Sixth avenue line below Forty-second street. New cars "with all the modern improvements, for the convenience and comfort of passengers" were to be used on these roads, and the cars were to be run both ways as often as the public convenience might require and under such directions as the street commissioner and the common council might from time to time approve. A minimum headway of fifteen minutes in each direction between five and six o'clock in the morning and between eight and twelve o'clock at night; of four minutes between six o'clock in the morning and eight o'clock in the evening, and of thirty minutes from midnight to five o'clock in the morning was definitely prescribed. It was stipulated that "the rate of passage on said railroad shall not exceed a greater sum than five cents for the entire length of said road." The common council reserved the right to cause the railroad or any part of it "to be taken up at any time" when it saw fit, and the grantees were forbidden to assign their interest in the road without the council's consent. The tracks were to be laid on a concrete foundation with a grooved rail or such other rail as might be approved by the street commissioner. The foundation of each side of the rails was to be paved with square, grooved blocks of stone as far as Fifty-first street on the Eighth avenue line and as far as Thirty-second street on the Sixth avenue line. The grantees were required to keep an account of the receipts of each road and make a monthly report under oath to the city comptroller. They were also required to connect their road with other roads when ordered to do so by the common council. Provision was made for possible municipal ownership in a clause stipulating that the grantees "shall file with the Comptroller a statement, under oath, of the cost of each mile of road completed, and agree to surrender, convey, and transfer the said road to the Corporation of the City of New York, whenever required so to do, on payment by the Corpora-

tion of the cost of said road, as appears by said statement, with ten per cent advance thereon." On certain streets covered by both grants the railway was to be built at the joint expense of the two companies to be organized by the grantees. It was required that both lines should be commenced within six months and that within one year the Sixth avenue line should be completed to Forty-second street and the Eighth avenue line to Fifty-first street, and that within three years both lines should be completed to the Harlem river. The Sixth Avenue Railroad Company and the Eighth Avenue Railroad Company were organized and the contruction of both roads was commenced under these resolutions and agreements.

314. The first general street railway law in New York, 1854.—The first general law enacted in the state of New York authorizing the construction of street railways was passed April 4, 1854.[1] Under this act the common council of any city was forbidden to authorize the construction in the streets of the city of "a railroad for the transportation of passengers which commences and ends in said city, without the consent thereto of a majority in interest of the owners of property upon the streets in which said railroad is to be constructed being first had and obtained." It was expressly provided that after obtaining such consent the council should have the right to grant authority for the construction of a street railway upon such terms and conditions as it might see fit to prescribe. It was provided, however, that no such grant should be made except to a person or persons who would give adequate security to comply in all respects with the conditions prescribed by the common council and who would agree to carry passengers at the lowest rate of fare. It was also provided that no grant could be made until notices had been published in the newspapers setting forth the terms and conditions upon which it was proposed to give the franchise and inviting proposals for the grant at a specified time and place. It was afterwards held by the courts of the state that prior to the passage of this act the common council of the city of New York had no authority to grant street railway franchises except as such power had been conferred by specific acts relating to particular companies. The rights, however, of all

[1] Chapter 140, Laws of New York, 1854, entitled "An Act relative to the Construction of Railroads in Cities."

companies which had commenced the construction of their roads under the authorization of the local authorities were confirmed by section 3 of this act, which was as follows:

"This act shall not be held to prevent the construction, extension, or use of any railroad in any of the cities of this State which has already been constructed in part; but the respective parties and companies by whom such roads have been in part constructed, and their assigns, are hereby authorized to construct, complete, extend, and use such roads in and through the streets and avenues designated in the respective grants, licenses, resolutions, or contracts, under which the same have been so in part constructed; and to that end the grants, licenses, and resolutions aforesaid are hereby confirmed."

315. Privileges confirmed and obligations canceled by judicial interpretation.—It is a curious commentary upon the New York court of appeals that when an action was brought in 1898 to test the right of the city to purchase the property of the Eighth Avenue Railroad Company under the provisions of its agreement with the common council of September 6, 1851, the court held substantially that Chapter 140 of the Laws of 1854 had confirmed the privileges of this company but had not confirmed the obligations which it had voluntarily assumed.[1] This decision was rendered in spite of the fact that the obligations referred to were a part of "the grants, licenses and resolutions of the local authorities" which were specifically confirmed by this act, and also in spite of the fact that this law specifically forbade the granting in the future of any local franchise except to persons who would give adequate security to comply in all respects with the terms and conditions stipulated by the common council. This particular case was decided just at the time when the Metropolitan Street Railway Company, under the astute counsel of Elihu Root and the executive direction of William C. Whitney, was bringing together the magnificent system of street railways, with unlimited capitalization based upon perpetual rights in the streets of New York, which finally collapsed about ten years later. The decision of the Eighth Avenue Railroad case against the contention of the city was absolutely necessary at that time for the furtherance of the plans of the Metroplitan company.

Prior to the passage of the general act of 1854, the city attempted to grant several other franchises. These other

[1] See the case of *Potter v. Collis*, 156 N. Y., 16.

grants, however, were not revocable at the will of the city and made no provision for municipal purchase. The franchise of the Second Avenue Railroad Company was granted with very few restrictions by resolution of the common council in effect December 11, 1852, and embodied in an agreement with the grantees dated December 15, 1852.[1] The franchise of the Third Avenue Railroad Company was granted by a resolution in effect December 31, 1852, and embodied in an agreement with the grantees dated January 1, 1853.[2] Construction having been commenced under these franchises prior to the passage of the law of 1854, the grants were by that act confirmed. The franchise of the Ninth Avenue Railroad Company was granted by a resolution passed over the mayor's veto December 28, 1853, and was accepted by the grantees December 30, 1853.[3] Litigation over the validity of this grant followed, and the road was not finally built until 1859. The franchise was confirmed by special act of the legislature passed April 14, 1860.[4] Under this franchise the company was required to pay an annual car license fee of twenty dollars. Under most of the other franchises to which reference has been made the grantees were required to pay a car license fee in an amount to be thereafter determined by the common council.

316. Terms of the original Broadway franchise, declared invalid by the courts.—One of the most interesting franchises which the common council in those early days, which, by the way, was known as "The Forty Thieves," attempted to grant, was set forth in a resolution passed over the mayor's veto December 30, 1852, authorizing Jacob Sharp and associates to construct a double track railway in Broadway from Battery Park to Fifty-ninth street and continuing thence along the Bloomingdale road, now known as Broadway, to Manhattanville, a popular name for the section on the west side of Manhattan Island in the neighborhood of One Hundred and Thirtieth street.[5] This grant was afterwards declared invalid by the court of appeals, construction not having been commenced in time to bring it under the general con-

[1] Ferry Leases and Railroad Grants, *already cited*, p. 173.
[2] *Ibid.*, p. 181.
[3] *Ibid.*, p. 294.
[4] Chapter 411, Laws of New York, 1860.
[5] Ferry Leases and Railroad Grants, *already cited*, p. 243.

firmatory act of 1854.[1] It was not until 1884 that Jacob Sharp secured a valid grant for this portion of Broadway. Although the later grant was secured by means of bribery on a gigantic scale, as was afterwards proved, the courts of New York had by that time become so much impressed with the importance of vested privileges that in the notable case of *People v. O'Brien*,[2] the court of appeals held the stolen Broadway franchise of 1884 to be perpetual and irrevocable. The court reasoned that although the legislature might under the provisions of the New York constitution revoke the charter of the corporation to which the franchise had been given, the grant itself was a contract protected by the federal constitution as interpreted in the Dartmouth College case. The court even held that the specific reservation to the legislature of the right to amend, alter or repeal any of its acts relative to corporations could not be construed as authorizing it to repeal a franchise grant.

The ineffectual grant to Jacob Sharp and his associates in 1852 required that the outer rails laid by the grantees should not be more than twelve feet six inches apart; that the rails should be laid flush with the pavement; that the inner portion of the rail should be equal in height with the outer; and that the groove should not be more than one inch wide unless some other type of rail were approved by the street commissioner or the common council. The space between the rails and for one foot on either side was to be kept in repair by the grantee. It was stipulated that the cars "with the horses attached" should not exceed forty-five feet in length. The grantees were required to procure a depot at some point near the southern terminus of their route "for the purpose of keeping withdrawn from Broadway such proportion of the cars coming down in the morning as shall not be required for the accommodation of the return travel until the afternoon." They were also required to stop some of their cars at the park and "to send down below that point no greater proportion of the whole number employed than shall be found by experience to be requisite for the accommodation of the travel below that point subject to regulation by the common council." No strap-hangers were to be permitted. "The cars shall be so constructed," said this grant, "as not to make provision in-

[1] *See* case of *Milhau v. Sharp*, 27 N. Y. 611. [2] 111 N. Y. 1.

within their respective departments, as may be needful to promote the construction and protect the operation of the said railroad as provided in this law."

Street railway franchises in New York City continued to be granted directly by the legislature until 1875. During the latter part of this period in two or three cases provision was made for the payment of compensation. Indeed the Twenty-third street railway franchise, which was sold at public auction under a special act of the legislature passed in 1869, brought $150,000 into the city treasury.[1]

318. Right to purchase at cost plus annual interest at 14 per cent reserved in early franchise in Brooklyn and Jamaica.— As early as 1832 the Brooklyn and Jamaica Railroad Company was chartered by the legislature of New York for the purpose of constructing a railroad from "any eligible point" in the village of Brooklyn to the village of Jamaica.[2] This company was required to purchase the stock of the Brooklyn, Jamaica and Flatbush Turnpike Company with the evident purpose that it should transform the turnpike into a right of way for its railroad. The company was not permitted to use steam power within the village of Brooklyn or to occupy any street or lane in the village without first securing the consent of the local authorities. The legislature provided that at the end of every year after the construction of the railroad had been commenced and for a term of fifteen years after construction had been completed, the company should file in the secretary of state's office a detailed account of all the money expended during the year in constructing the railroad and its appendages and in superintending and keeping the road in repair. A similar account of income was to be filed "to the end that a just estimate may be made of the profits received by the said corporation." It was expressly provided that if the legislature at the expiration of ten years and within fifteen years from the completion of the road should make provision for the repayment to the company of the amount expended by it in construction work, together with all moneys spent for permanent fixtures for the use of the road, with interest on such sums from the time of their expenditure at the rate

[1] *See* Chapter 823, Laws of New York, 1869, and Chapter 521, Laws of New York, 1872.

[2] Laws of New York, 1832, Chapter 256.

lawful thereafter to lay, construct or operate any railroad on any of the streets or avenues in the city of New York, "wherever such railroad may commence, or end, except under the authority and subject to the regulations and restrictions which the legislature may hereafter grant and provide."[1] This act was not to be construed, however, as affecting the operation "as far as laid" of any railroad then constructed and duly authorized, or so as to impair any valid grant for a railroad in New York City existing on January 1, 1860.

At the same session of the legislature and in fact on one day, April 17, 1860, five different street railway franchises were passed into law over the governor's veto.[2] These franchises gave the right to convey passengers and freight over the roads to be constructed, and required that cars be run as frequently as public convenience should require, subject to reasonable regulations of the common council and to the payment of the same license fee for passenger cars which was then being paid by other city railroads in New York City. Fares were also limited to those then charged by other city railroads. The common council was authorized and required to grant permission to the persons named in the acts and their assigns for the construction and operation of the railroads along the streets enumerated. The grantees in each case were authorized to use any portion of other railroad tracks already laid in the streets covered by these grants. Compensation for the use of tracks already laid was to be determined by agreement with the owners or by court proceedings such as were available to railroad companies for the condemnation of land. Each of these acts stipulated that "in all cases the use of said streets and avenues for the purposes of said railroad, as herein authorized, shall be considered one of the uses for which the Mayor, Aldermen and Commonalty of said city hold said streets and avenues." It was also specifically required that the mayor, common council and other officers of the city should "do such acts,

[1] Chapter 10, Laws of New York, 1860.

[2] Chapters 511, 512, 513, 514, 515, Laws of New York, 1860. In each of these acts, a number of individuals were named as grantees. All five roads covered by these franchises were afterwards constructed. They became the property of the Bleecker Street and Fulton Ferry Railroad Company, the Broadway and Seventh Avenue Railroad Company, the Central Park, North and East River Railroad Company, the Forty-second Street and Grand Street Ferry Railroad Company and the Dry Dock, East Broadway and Battery Railroad Company.

within their respective departments, as may be needful to promote the construction and protect the operation of the said railroad as provided in this law."

Street railway franchises in New York City continued to be granted directly by the legislature until 1875. During the latter part of this period in two or three cases provision was made for the payment of compensation. Indeed the Twenty-third street railway franchise, which was sold at public auction under a special act of the legislature passed in 1869, brought $150,000 into the city treasury.[1]

318. Right to purchase at cost plus annual interest at 14 per cent reserved in early franchise in Brooklyn and Jamaica.— As early as 1832 the Brooklyn and Jamaica Railroad Company was chartered by the legislature of New York for the purpose of constructing a railroad from "any eligible point" in the village of Brooklyn to the village of Jamaica.[2] This company was required to purchase the stock of the Brooklyn, Jamaica and Flatbush Turnpike Company with the evident purpose that it should transform the turnpike into a right of way for its railroad. The company was not permitted to use steam power within the village of Brooklyn or to occupy any street or lane in the village without first securing the consent of the local authorities. The legislature provided that at the end of every year after the construction of the railroad had been commenced and for a term of fifteen years after construction had been completed, the company should file in the secretary of state's office a detailed account of all the money expended during the year in constructing the railroad and its appendages and in superintending and keeping the road in repair. A similar account of income was to be filed "to the end that a just estimate may be made of the profits received by the said corporation." It was expressly provided that if the legislature at the expiration of ten years and within fifteen years from the completion of the road should make provision for the repayment to the company of the amount expended by it in construction work, together with all moneys spent for permanent fixtures for the use of the road, with interest on such sums from the time of their expenditure at the rate

[1] *See* Chapter 833, Laws of New York, 1869, and Chapter 521, Laws of New York, 1873.

[2] Laws of New York, 1832, Chapter 256.

of fourteen per cent per annum, together with all moneys spent by the company for repairs or otherwise for the purposes of the road, after deducting the amount of tolls received, "then the said railroad with all its fixtures and appurtenances shall vest in and become the property of the people of this state." The legislature reserved the right to alter or repeal this company's charter at any time. This grant became the basis of both steam road and street railway franchises that are still in use.

319. Differential rates of fare under old Brooklyn City Railroad franchises.—The first full-fledged street railway company that acquired rights in the city of Brooklyn was, however, the Brooklyn City Railroad Company, which received a franchise by resolution of the common council adopted December 19, 1853, and accepted eleven days later.[1] Under this grant the company was authorized to construct eight different lines of double track street railway, on condition that improved grooved iron rails should be used, laid even with the surface of the pavement, so as not to interfere with the passage of vehicles. Suitable bridges were to be constructed at all the gutters so as to permit the flow of water under the tracks. The rails were to be laid "on substantial sills of the best yellow pine timber, with the best chestnut cross-ties of suitable dimensions." The portion of the street surface between the tracks and for three feet on each side was to be kept in thorough repair by the company "with the best water stone, under the direction of such competent authority as the common council may designate." The cars were to be "of the most approved kind in style and finish, and of such sizes as shall be best adapted to the respective routes, to be propelled by horse power only; the horses to be provided with bells and the cars with signal lights." As many cars were to be operated on each line as public convenience should require, subject to prudential regulations by the common council, but no cars were to be allowed to run on Sunday. The company's double tracks were not to occupy more than 14 feet 6 inches in width. On some routes the company could charge five cents; on others only four cents. The license fee for cars varied from $10 to $50 ac-

[1] Document No. 24, in "Documents Addressed to the Common Council during the year 1877," page 456.

cording to the route. The construction of the railroad was to be commenced as soon as possible and was to be entirely finished by December 1, 1854, "as far as practicable." Bonds in the amount of not less than $200,000 for the faithful performance of the conditions and stipulations of this grant and to guarantee that the company's roads should be "perfectly completed and conducted" were required and given.

The company's franchise was confirmed by the legislature in March, 1854, and in December of that year the common council authorized the company to charge a straight five cent fare on all its routes for the ensuing period of five years, except that infants under two years of age were to go free and school children and all others under ten years of age were to pay three cents.[1] Additional trips were to be run in the afternoon between four and eight o'clock "as the travel shall require." In 1855, the legislature passed an act prohibiting the company from issuing certificates of capital stock for more than the amount which might be actually paid in.[2] On January 16, 1860, the common council authorized the company to change its system of fares. Under the new arrangement the company was to sell at its office tickets in parcels of twenty-five at the rate of $4 a hundred, good on all the company's lines. Cash fare for adults was to be five cents. The fare for children between two and twelve years of age was to be three cents and children under two were to pass free. In 1866 when street car tickets were subject to an excise tax levied by the United States government, the Brooklyn common council passed a resolution modifying the company's existing rates of fare so as to require the sale of twenty tickets for $1 without any addition for the government tax.[3] These early grants were unlimited as to time, and form the basis of an extensive system of street railways which are still being operated in Brooklyn and Queens.

By a special legislative act passed April 17, 1858,[4] certain individuals who afterwards organized the Broadway Railroad Company of Brooklyn were given a franchise on Broadway and other streets of Brooklyn substantially on the

[1] Document No. 24, *already cited*, p. 463.
[2] *Ibid.*, p. 464.
[3] *Ibid.*, p. 466.
[4] Laws of New York, 1858, chapter 303.

same conditions as to type of rails, rates of fare and operation of cars as were at the time in force in connection with the Brooklyn City Railroad Company, as already set forth. Under this act, however, the grantees were authorized to make use of any tracks already laid in the streets covered by their route on the condition that they should pay for the right an amount fixed by agreement or by arbitration, and that they should not interrupt or interfere with the passage of the cars of the company owning the tracks. This act provided that the company's capital should be taxed in the city of Brooklyn and that the cars should pay a license fee and be subject to police and municipal control as provided with respect to other city railroads of Brooklyn. The company was authorized to issue bonds for constructing, equipping and operating its road to the amount of one-half of the capital stock issued for these purposes, but each stockholder was to be personally liable for the payment of the bonds. This franchise was granted on condition that a majority of the owners of property abutting on the company's route should sign a petition to the common council in favor of the construction of the road. Two years later, in 1860, the legislature granted this company the right to extend its railroad into certain additional streets. The company was to complete the track extensions by October 1, 1861, "or as soon thereafter as the said streets and avenues within said city shall have been opened, graded and paved." The company neglected to build on the routes described in this act and many years later the franchise was declared forfeited by the courts.[1]

While many other street railway companies acquired franchises from Brooklyn in the early days, these grants were for the most part similar in terms to those already described. At the present time there are four principal companies operating street surface railways in Brooklyn. Three of these are a part of the Brooklyn Rapid Transit system. All of these companies charge a uniform five-cent fare within the old Brooklyn city limits, as they existed prior to 1894. The companies do, however, charge a ten-cent fare from the Brooklyn and Williamsburgh bridges to Coney Island, and also from these bridges and other points in Brooklyn to

[1] 126 N. Y., 29, decided March 10, 1891.

Flushing and North Beach in the Borough of Queens. Tickets are nowhere in evidence on these lines, and the conductors charge the same rate for children as for adults unless the passenger happens to know that children are entitled to a three cent fare and makes a demand for it. On the other hand, children are carried free far beyond the two-year limit of age set in the old franchises.

320. Old steam roads, turnpikes and freight handling on street railways in Brooklyn.—Street railway franchise conditions in Brooklyn are somewhat complicated by the fact that certain important lines now operated by street railway companies were originally steam railroads connecting the old city of Brooklyn with Coney Island, or other outlying points. Some of these roads many years ago were operated by steam outside of the city limits and by horse power within the city limits. A curious illustration of ancient practices is revealed by a resolution of the Brooklyn common council passed June 26, 1865, by which the Brooklyn, Bath and Coney Island Railroad Company was "permitted to run their dummy engine cars from city line to the corner of Thirty-sixth street and Fifth avenue, and thence along Fifth avenue to the corner of Twenty-sixth street, provided the same be preceded by one or more horses, subject to the pleasure of the Common Council."[1] It does not appear from the record whether the Brooklyn aldermen thought that horses running in front of the engines would "shoo away" the people better or merely that the company would limit the speed of its trains in order not to run over its own live stock. The Brooklyn, Bath and Coney Island Railroad, by a series of transfers and mergers since that time, has at last become an integral part of the Brooklyn Rapid Transit system. The portion of the road lying outside of the old city of Brooklyn is now operated in connection with the elevated lines as a rapid transit road to Coney Island.

Elevated trains pass along New Utrecht avenue, the principal diagonal thoroughfare in that portion of Brooklyn, at grade. This street was originally laid out as a public highway and was immediately turned over to a plank road company for construction. The plank road company, a number of years later, authorized the railroad company to

[1] Document No. 24, *already cited*, p. 507.

lay its track along one side of the plank road. Later, the railroad company absorbed the capital stock of the plank road company, and the latter, about thirty or thirty-five years ago, was allowed to lapse. The plank road became once more a public highway, but with a railroad claiming exclusive possession of a strip along one side of it. Years passed and the railroad company set up a claim that it owned this strip of land in fee. The history of the case shows that this claim was preposterous, but loud and persistent assertion of the company's claims, coupled with a supine and fearsome attitude on the part of the local authorities, has left the railroad company still in possession with a fair chance of making good its right to run a rapid transit railroad through a leading thoroughfare at grade until the city is willing to help pay the cost of putting the railroad on an elevated structure.

Similar claims under somewhat similar conditions have been made with a similar degree of success by the companies occupying Coney Island avenue and Gravesend avenue, two of the principal thoroughfares in that portion of Brooklyn lying between the old city and Coney Island. In the case of Coney Island avenue, the Coney Island and Brooklyn Railroad Company, having secured a legislative franchise to occupy the street, condemned the right from the plank road company then in possession, and many years afterwards set about to secure a further title to the strip of land occupied by its tracks by getting the consent or by condemning the interest of abutting property owners. Under the laws of New York, property condemned by railroad companies is not acquired in fee, but for railroad purposes only. Nevertheless, in a few condemnation cases, the Coney Island and Brooklyn Railroad Company secured orders from the court purporting to give the company title "in fee simple." Although these orders covered less than one-fourth of the distance on Coney Island avenue occupied by the company's tracks, the company's attorneys have for many years stoutly maintained that the company owns in fee the right of way throughout the entire length of the avenue. On the strength of this claim, the company has recently secured from the board of estimate and apportionment authority to place its tracks in the center of the street and

park the strip of land twenty feet wide occupied by them, so as to give the company exclusive possession and permit the operation of a rapid transit line of surface cars without interference from other users of the street.

Partly as a result of its inheritance of rights from original steam railroad charters and partly as a result of the privileges conferred upon street railroads under the laws of New York, the Brooklyn Rapid Transit system enjoys the right to operate freight cars throughout the borough of Brooklyn on its street railway tracks. Indeed, under a decision of the court of appeals it has been held that street surface railroad companies incorporated under the general railroad law may operate cars designed and intended exclusively for carrying express matter, freight or property and used exclusively for such purposes.[1] It was also held by the court that whatever right to transport freight or property had been acquired by a company became a vested right which could not be defeated or impaired by legislation. Freight traffic on the street railways has been developed to a considerable extent in Brooklyn. Although the right of a street railway company, in the absence of a franchise prohibition, to operate freight cars on a par with passenger cars has been fully established, this right is somewhat limited in practice by the doubt existing as to the right of a company to maintain a spur track from a main line of street railway across a sidewalk into private premises for exclusively private use. It is obvious that the freight business of a street railway system cannot be developed to a very great extent unless spur tracks into private factories, stores and yards, can be maintained.

321. General street railway law under constitutional requirement of local consents, 1884.—On January 1, 1875, a constitutional amendment went into effect forbidding the legislature of the state of New York to pass any law authorizing the construction of street railways except with the consent of the local authorities having control of the streets and with the further consent of the owners of the majority in interest of the property abutting upon that portion of each street in which the railway was to be constructed. It was provided, however, that if property owners' consents could not be obtained, application might be made to the general

[1] *See* case of Degrauw v. Long Island Electric Railway Company, 163 N. Y., 597.

term of the supreme court for the appointment of three commissioners to take testimony relating to the necessity of constructing the proposed railway. If these commissioners reported in favor of such construction and their report was confirmed by the court, this finding would be taken in lieu of the consents of property owners.

For nearly a decade after this amendment went into effect there was a lull in the granting of franchises in the cities of New York State. It was not until 1884 that a general act was passed authorizing the incorporation of companies for the purpose of building street surface railways in cities, towns and villages.[1] Under this act any number of persons not less than thirteen might form a corporation for the purpose of constructing, maintaining and operating a street surface railroad for public use for the conveyance of persons and property in cars for compensation. In their articles of association the incorporators were required to state the name of the company, the number of years it was to continue, the names of the local subdivisions where the road was to be built and the names of the streets in which tracks were to be laid. The articles of association were to be filed in the office of the secretary of state when $1000 of stock for every mile of proposed railway had been subscribed and ten per cent of it paid in. It was provided that any company organized under this act, or any street surface railroad company already existing, should have the right to build and operate a surface street railway along any streets, avenues, roads or highways, and along any private property acquired for the purpose, on condition that the consents required by the constitution be first obtained. It was stipulated that the consent of property owners should be acknowledged in the same way as deeds which are entitled to be recorded. The common council was designated as the local authority for giving the consent of the city, subject to such power as the mayor possessed to veto ordinances. In case of other local authorities having exclusive control of any particular street proposed to be used for a street railway, the consent of these other authorities was also required. In cities, all applications for franchises were required to be in writing and all franchises were to be granted only after two weeks' published

[1] Chapter 252, Laws of New York, 1884,

notice and upon the express condition that the provisions of this law be complied with. It was provided that any consent given by the local authorities should become void within one year unless, before the expiration of that time, the company had secured the consent of the property owners or the authorization of the court. The city's consent to the use of the street would operate also as its consent as the owner of any property abutting on the street. Any company applying to the court for authorization to construct its road was required to serve on every property owner who had not given his consent ten days' advance notice of such application. The local authorities of any incorporated city were expressly authorized to consent to the operation of a railway on any street within their jurisdiction and, at their option, provide for the sale of the franchise at public auction. In cities with a population of 250,000 or more, every street railway company was required to pay into the city treasury three per cent of its gross receipts during the first five years after the commencement of operation and five per cent thereafter. Companies organized under preceding acts were required to pay these percentages on their extensions made under this act, and each mile of the extensions was to be considered as earning the same proportion of the gross receipts as the average earnings per mile of the company's entire system. It was stipulated that in case a company failed to comply with all the provisions of this act, the corporate rights, privileges and franchises acquired under it should be forfeited in a suit brought by the attorney-general. The local authorities were authorized to make reasonable regulations as to the rate of speed, the mode of use of the tracks and the removal of ice and snow, and any street railway company whose agents wilfully or negligently violated any such regulation would be liable to a fine of not to exceed $500. In case any company incorporated under this act or seeking to extend its road under this act, should fail to commence construction within one year after it had acquired the necessary consents or should fail to complete its road within three years after such consents had been obtained, its rights, privileges and franchises under this act would terminate. Any street railway constructed under this act could be operated by horses or by any other power except steam, with the

consent of the local authorities and the property owners. The rate of fare to be charged any passenger for one continuous ride from any point on the company's road or on any road or branch operated by it or under its control to any other point on such road or branch, or any connecting branch within the limits of any incorporated city was not to exceed five cents. This provision was not to apply, however, to any street railways already built and then in operation, unless the existing companies applied for extensions, and in that event the fare on their roads, including the extensions, was to be no greater than the rates authorized prior to that time. There was an express prohibition of the construction, extension or operation of a company's road or tracks in that portion of any street in which another street surface railway was already constructed except with the consent of the company owning the other railway. There was a provision, however, to the effect that for not more than 1,000 feet a company might have the use of another company's tracks whenever the court, on application, was satisfied that such use was actually necessary to connect main portions of a line to be constructed as an independent railroad, and that the public convenience required such use. Companies were authorized to lease or transfer their right to operate on the whole or any portion of their tracks to other companies, but by a special exception, this provision was not to be construed as authorizing any company in a city of over 300,000 population to lease its rights or franchises to another company owning and operating a parallel line.

322. Sale of franchises at auction, 1886 to 1897, illustrated.—In 1886, two years after the passage of the general act just described, the legislature passed a general act requiring that local franchises for street railways to be constructed "for the transportation of passengers, mails or freight," be sold at public auction to the company agreeing to pay the largest percentage of its gross receipts into the city treasury and to complete the road and put it in operation upon the designated routes within three years from the date of sale.[1] The legislature, however, expressly reserved the right to regulate and reduce the rate of fare on any such railway. The purchaser of a franchise was required to keep accurate

[1] Chapter 65, Laws of New York, 1886, as amended by Chapter 642, *ibid.*

books of account of the business and earnings of the railroad and these books were to be subject at all times to inspection by the local authorities. Refusal to pay the percentages agreed upon, which were to be in addition to those required under the general street railway incorporation act, would subject the company to forfeiture by decree of court after a hearing. In such a case the city would have the authority to resell the franchise. It was expressly provided that all consents thereafter given by the local authorities should cease at the expiration of two years from their date and all consents that had already been given should cease within two years from the date of this act, unless prior to the expiration of the prescribed time the company holding the consents should perfect its legal right to construct its road by acquiring the requisite consents of property owners, or the approval of the court.

By another act of the same year,[1] it was provided that whenever any street railway had been dissolved or its charter repealed by an act of the legislature the consent of the property owners and of the local authorities to the construction of the company's railroad and the order of the court authorizing such construction should not be deemed to be revoked, but that the right to the further enjoyment of such consents should be sold at public auction by the municipal authorities.

The law requiring the sale of franchises was in effect in New York City and Brooklyn until the consolidation of the two cities under the Greater New York charter in 1897, but the actual working out of the policy was not particularly happy. As an illustration of the workings of the general law just described, the case of the Twenty-eighth and Twenty-ninth Streets Railroad Company may be cited. This company was one of the first to be incorporated under the street railway law of 1884. By resolution of the common council of the city of New York passed over the mayor's veto, November 30, 1886, consent was given to the construction of a street railway upon the route petitioned for by this company. Among the conditions of this grant, it was stipulated that in the construction and equipment of the road the work and materials used should be of the best quality, and

[1] Chapter 271, Laws of New York, 1886.

side-bearing rails with the outer edges flush with the pavement and with the inside drop not exceeding one inch in depth should be used. Cars were to be run as often as public convenience should require and no freight cars were to be operated on the road. The purchaser of the franchise was to be "absolutely and unqualifiedly bound" to keep in permanent repair the portion of the street surface between the tracks, the rails and for a space of two feet on either side, so long as the tracks continued to be used. It was also stipulated that the purchaser should be bound to remove the snow from the tracks and for two feet on either side "immediately after it shall have fallen, or as soon as possible thereafter, and not merely to clear the tracks and the space between them by removing the snow to the space intervening between the tracks and the curb-stone, but to remove the snow entirely from that portion of the streets or avenues made use of for the construction and operation of the railroad so far as such snow may have fallen or ice may have formed" upon the tracks. All of the snow and ice when removed was to be taken from the streets and deposited at the nearest place used by the city authorities for the deposit of snow removed by themselves. The road was to be operated only by animal or horse power, until the right to use some other motive power should be obtained as required by the general street railway law. Percentages of gross receipts payable under this grant were to be "computed upon a fare of five cents as having been received as part of the gross receipts from every passenger who should ride upon any part of the route and irrespective of the fact whether such passenger enters or leaves the car at any point upon the said route." It was required that the purchaser of the franchise file a written instrument under the corporate seal of the company, attested by its president or treasurer and by virtue of a resolution of its board of directors, accepting the grant on the terms and conditions set forth. The company which had applied for the franchise was the highest bidder at the sale. It agreed to pay to the city 29.2% of its gross receipts in addition to the percentages required by the general street railway law. Later this company and certain others which had bid high for their franchises found themselves unable to get their roads into operation under the onerous conditions they had assumed.

Accordingly, in 1893 another act was passed [1] authorizing the sinking fund commission of any city to compromise and release any existing liability or obligation to the city assumed under the law providing for the sale of franchises whenever, in the opinion of the commission, such release or compromise would be just and equitable for the public interest. Accordingly, by an agreement dated September 29, 1896, the sinking fund commission of New York reduced the payments required of the Twenty-eighth and Twenty-ninth Streets Railroad Company from 29.2 per cent to ½ of one per cent of its gross receipts in addition to the percentages made obligatory by the railroad law. In another case, that of the North and East River Railway Company, predecessor of the Fulton Street Railroad Company, the franchise was sold for thirty-five per cent of the company's gross receipts, and thereafter the obligation was "compromised" to one-eighth of one per cent.[2] A still more ludicrous example of the ineffectiveness of the law requiring the sale of franchises occurred in 1895 and 1896, when a franchise covering an extensive system of routes in The Bronx was advertised. Three companies competed for this grant. The bidding was so keen that the amount offered for the franchise was run up to several thousand per cent of the gross receipts to be derived from its use. The city comptroller had some compunctions of conscience about selling a franchise at so high a figure, and so after much delay and some litigation it was finally determined to award the grant to the People's Traction Company of New York City, which had bid 97% of gross receipts in addition to the 3% required by the railroad law during the first five years of operation, and 95% in addition to the 5% required by the railroad law thereafter. Obviously this transaction was farcical. It is quite possible that a short extension at a strategic point in the systems of two or more rival companies might be sold under certain circumstances for more than the entire gross receipts of the extension, but such opportunities are extremely rare. The obvious purpose of the People's Traction Company in bidding for the Bronx franchise was

[1] Chapter 434, Laws of New York, 1893, section 93.

[2] This franchise was sold at public auction May 31, 1887, in accordance with a resolution of the board of aldermen passed over the mayor's veto December 30, 1886. The compromise was effected by an agreement between the North and East River Railway Company and the sinking fund commission under date of June 25, 1895.

not primarily to secure a franchise to be used in good faith, but rather to exclude rival interests from the territory, with the possible expectation that after the franchise had once been secured, the company holding it would be able to effect a "compromise" with the city authorities similar to those already described.

Most of the important street railway franchises of New York City were granted prior to the constitutional amendment of 1875. The few that were granted during the succeeding period before the passage of the Greater New York charter were, like most of the old ones, unlimited as to time and, therefore, as interpreted by the New York courts, perpetual.

323. Limited franchises required and municipal ownership made lawful by the Greater New York charter, 1897.—On May 4, 1897, a new franchise policy went into effect in all that territory now included in the city of New York. On that date the Greater New York charter was passed, with its express mandate that no franchise for the use of the streets should be granted for a longer period than twenty-five years, except that the local authorities in granting a franchise might bind themselves to a renewal or renewals of it aggregating not more than twenty-five years additional, any such renewals to be on the basis of a fair revaluation of the grant. In other words, in the great metropolitan center, where up to that time practically all street railway franchise grants had been perpetual, the state reversed this policy and enacted that fifty years with a revaluation at the middle of the period should be the maximum life of any future franchise granted. The franchise provisions of the charter have remained substantially the same since they were first enacted in 1897, except that the franchise granting power has been transferred from the municipal assembly to the board of aldermen, and finally from the board of aldermen to the board of estimate and apportionment. Under the charter every grant may provide that at its termination the plant of the grantee with its appurtenances will become the property of the city without further compensation, or that the property may be acquired by the city on paying a fair valuation excluding any value derived from the franchise. It is provided that whether the property reverts to the city without money payment or is bought and paid for, the city may operate it

on its own account or lease it out for limited periods. Every franchise must make adequate provision by way of forfeiture or otherwise to secure efficiency of public service at reasonable rates and the maintenance of the property in good condition throughout the full term of the grant. Every franchise must also specify the mode of determining the valuations for which it makes provision. The charter also requires that no franchise may be granted until after the board of estimate and apportionment has made an inquiry as to its money value and as to the adequacy of the compensation proposed to be paid for it.

324. Special franchise tax law and percentage payments in New York City.—The franchise tax law enacted by the New York legislature in 1899 provides that any percentages of gross earnings or any other income or license fee to any amount in the nature of a tax paid to a city for the use of a special franchise, may be deducted from the franchise taxes collected under this law. The city of New York has not taken kindly to this legislative policy and, taking advantage of the requirement of the charter that every franchise should be cast in the form of a contract, it has inserted in almost all recent grants as one of the terms and conditions which the grantee is bound to accept, a provision that the payment exacted under the franchise agreement shall not be considered in any manner as a tax and shall not be deducted from the franchise taxes levied by the state for the city's benefit. The history of this particular policy is full of interest. Prior to 1884 most of the franchises in New York City had been granted in perpetuity and without compensation. The horse railroads of New York City were at one time scandalously profitable. Consequently when a general street railway law was enacted in 1884, as we have already seen, the legislature required that in all cases companies organized under it should pay certain percentages of their gross earnings into the city treasury. This law did not affect street railways already constructed. The result was that most of the important streets in the heart of the city continued to be occupied without charge except for car license fees, while suburban lines developed by new companies were compelled to pay a considerable tax. In case an old company made an extension, it was required to pay a tax on the earnings of the extension

reckoned on the theory that a mile of track in the outlying sections earned as much as a mile of track in the congested districts. The gross receipts tax as imposed by the law of 1884 inflicted a penalty, therefore, upon the extension of old street railway lines or the construction of new ones. If a company thought it desirable to push its lines out further into the suburbs, it was tempted to do it indirectly by means of a dummy corporation whose gross receipts tax would be based upon the earnings of the extension itself, rather than upon the average earnings of an equal mileage of the company's entire system. The effect of the law was to discourage the extension of transit facilities and particularly to discourage the extension of existing lines. When the legislature enacted the special franchise tax law it levied a uniform tax upon all companies, old and new, which was heavier than the heaviest any of them had been required to pay under the gross receipts tax law. Accordingly, it permitted those companies which were liable to the gross earnings tax to subtract it from the sum of the special franchise taxes due, and by this means the discrimination in taxation in favor of the old, rich lines and against the new, undeveloped and, therefore, less profitable lines, was removed. At this point, however, the city stepped in and said it would not permit the equalization of the tax burdens, but would insist that all applicants for street railway grants should sign away their rights under the law and accept a disadvantageous position as compared with the companies which had preceded them. It is undoubtedly true that if one valuable franchise has been given away, this does not excuse the continuance of the policy, and no doubt the city has based its later action upon the theory that a street railway company cannot be compelled to pay too much into the public treasury.

325. The standard form of franchises now in use adapted to a particular case—The South Shore Traction grant.—Only a few important street railway franchises have been granted by New York City since the date of consolidation. The city has, however, worked out a standard form of franchise which is applied with a reasonable degree of consistency to all grants now made. This standard form is based primarily upon the requirements of the charter. To illustrate the city's street railway policy, we may take the case

of the franchise to the South Shore Traction Company, the provisions of which were disapproved by the public service commission for the first district.[1] This grant was for a line of street railway extending from the Manhattan end of the Queensboro bridge straight through the heart of the great borough of Queens to the eastern city line, a distance of about fourteen miles. Owing to the character of the street layout in Queens and the location of the Sunnyside railroad yard at the Queens terminal of the bridge, the route granted to this company was substantially the only available route for street railways leading from the territory traversed in the borough of Queens to the bridge. Population along the line of this route is still very meagre. The city, therefore, thought best to give this franchise for the maximum period allowed by the charter,—twenty-five years, with the right of renewal for twenty-five years more. For this grant the company was to pay $20,000 in cash and certain minimum annual sums aggregating during the twenty-five year period a total of $267,000. These minimum payments were estimated on the basis of three per cent of the company's gross receipts for the first five years, five per cent for the next ten years and six per cent for the last ten years of the period, but in case the minimum payments required were less than the sums accruing under these percentages, then the company was to pay on the percentage basis. The company was also required to pay a toll of five cents per round trip for every car crossing the Queensboro bridge, upon which the tracks were laid by the city; four per cent on the cost of the terminal facilities furnished by the city at either end of the bridge, and a graduated rental amounting in the aggregate to $62,500 for the use of the viaduct over the Sunnyside yard at the bridge approach. The company was also required to contract away its right under the franchise tax law to subtract these payments made to the city from the amount of its franchise taxes. The revaluation of the franchise at the expiration of the first twenty-five-year period, in case the

[1] This franchise was granted by resolution of the board of estimate and apportionment approved May 20, 1909, and accepted by the company on the same date. The action of the public service commission in refusing to grant a certificate of permission and approval for the exercise of this franchise was taken to the courts and overruled. The decision of the court of appeals was handed down October 26, 1909, 196 N. Y., 212. In this decision the court did not pass upon the merits of the franchise, but overruled the commission on questions of jurisdiction.

company decided to exercise its option for a renewal, was to be fixed either by agreement or, in case the parties should not have reached an agreement at least one year prior to the expiration of the original period, then by appraisal. The rate so fixed was to be reasonable and not less than the rate in force during the last year of the original period. The appraisers were to be selected, one by the board of estimate, one by the company and the third by the two so chosen. No provision was made for the appointment of the third in case of a deadlock between the two first appointed. The appraisers were to have access to the company's books and the right to examine the company's officers under oath. The expense of the appraisal was to be borne jointly by the city and the company.

It was provided that at the termination of the original contract or at the end of the renewal term or upon the termination of the franchise for any other cause or upon the dissolution of the company, the tracks and equipment constructed pursuant to this franchise within the lines of the streets and avenues should revert to the city without cost, to be used or disposed of by the city as it pleased. If, however, the city should not desire to take over the property, it was to be optional with the board of estimate by a resolution to compel the company on thirty days' notice to remove its tracks and equipment from the streets and restore the latter to their original condition. It will be noted that this franchise, following the general policy already adopted by the city, made provision for the reversion of the street railway tracks and street equipment to the city without cost, but on the other hand made no provision for the city's acquiring either by reversion or by purchase the rolling stock, power houses or other portions of the company's operating plant not included among the fixtures in the streets.

The city also included in the franchise a clause requiring the company to permit the joint use of its tracks to other companies properly authorized. It was in connection with this provision that the chief controversy arose between the public service commission and the local authorities. The franchise provided that any company desiring to use the tracks of the grantee should make compensation by means

of an initial payment and an annual payment, which were described as follows:

"(a) An initial payment to be mutually agreed upon by said corporation or individual and the Company, and in case of failure on the part of such individual or corporation and the Company to agree upon the amount of such initial payment, such amount shall be determined by three disinterested freeholders selected in the following manner: One disinterested freeholder shall be chosen by the company, one disinterested freeholder shall be chosen by the individual or corporation; these two shall choose a third disinterested freeholder, and the three so chosen shall act as appraisers and shall determine the amount of such payment. Such appraisers, in fixing such amount, shall consider compensation to the Company for: First, the sinking fund which may have been or should have been set aside for the retirement of the total investment represented by such property of the Company as is used by said individual or corporation, from the date of the granting of this franchise to the date upon which said individual or corporation begins the use of such property of the Company; second, the moneys expended by the Company in its organization and promotion; third, the increased value of the territory as a district suitable for railway operation, which increase may have resulted from the operation of the Company; fourth, the loss of business to the Company which may result from direct competition on its own lines; fifth, any other purpose or purposes which the appraisers may deem as justly due to said Company by such individual or corporation for the use of such property. The compensation and expenses of the said appraisers shall be borne by such individual or corporation.

"(b) An annual payment which shall equal the legal interest on such proportion of the actual cost of the construction of such railway and structures, and additions and betterments thereto, as the number of cars operated by such individuals or corporations shall bear to the number of cars operated by the companies then using the same; and also such proportion of the cost of keeping the tracks and electrical equipment in repair, and the cost of additions and betterments thereto, such propartion of laying and repairing of pavement and removal of snow and ice and all other duties imposed upon the Company by the terms of this contract in connection with the maintenance or the operation of said railway so used, as the number of cars operated by such individual or corporation shall bear to the number of cars operated by the companies then using the same, together with the actual cost of the power necessary for the operation of the cars thereon of such individual or corporation. Provided, however, that if, in the opinion of the Company, the legal rate of interest upon the cost of such railway shall be an insufficient sum to be paid for the use of such tracks, it may appeal to the Board, and the Board may fix a percentage upon the cost to be paid to the Company, at a sum in excess of the legal rate of interest, if, in its opinion, such action is justified."

So far as the writer is aware, this scheme of payment for the right to the joint use of tracks was without precedent, either in New York or elsewhere. A careful perusal of the

language of the section seems to make it clear that the franchise was granted as a fifty-year monopoly, with the provision that other companies might share in the benefits of it if they were willing and able to compensate the original grantee on the basis of monopoly. There was no complementary provision, however, requiring the grantee to make extensions when reasonably demanded by the public interest. Indeed, the theory of monopoly service with the right to compel a public service corporation to extend its lines to meet a reasonable demand is substantially foreign to the New York law.

In some respects the South Shore Traction Company's franchise was very stringent. It provided that at any time after ten years the city might on twelve months' notice compel the company to change from the overhead trolley system to the underground electric system on the portion of its line from the Queensboro Bridge to Jamaica. The company was required to commence the construction of its railway within six months after securing the required property owners' consents, or after the date of getting the authorization of the appellate division of the supreme court in lieu of such consents. The road was to be completed and placed in full operation within two years from the same date, or the franchise would become void and the company's money payments to the city including the $20,000 cash down and a $20,000 penalty fund would be forfeited. Moreover an additional deposit of $30,000 was required to guarantee that the road should be built as far as Jamaica within eighteen months from the date of final authorization. The route described in the company's franchise included several street crossings over the Long Island Railroad at grade. It was stipulated, however, that the grantee should not use these crossings but should construct its road either above or below the grade. The company was to have the right to erect temporary crossings and approaches either on private property or within the lines of the streets as might be determined by the city authorities, such temporary crossings to be used until permanent crossings above or below grade had been constructed for street traffic. In case the city should at any time change the grade of any street through which the company's line passed, the company was to make its tracks conform to the

new grade at its own expense. In case the president of the borough of Queens should be of the opinion that the existing roadway of the streets along the company's route was of insufficient width to accommodate both railway and other vehicular traffic, the company was bound to widen the roadway, but not to a greater width than the total width of the street, at is own expense. The company was required to pave and keep in permanent repair the portion of the street surface between its tracks, the rails of its tracks, and for a distance of two feet on either side. The city reserved the right to change the material or the character of the paving on any street, and in such a contingency the company was to replace the pavement in and about its tracks as directed by the city authorities, without cost to the city. Another provision of the franchise required the company to water the entire width of the roadway, up to sixty feet, of all streets and avenues used by the company's line, three times a day whenever the temperature was above 35 degrees Fahrenheit; but the city agreed to furnish the water for this sprinkling, free. There was a clause, however, authorizing the company with the approval of the proper city officials to oil the portion of the street which it was required to keep in repair. If the company did the oiling twice each summer season in such a way as to prevent the rising of dust, it was to be relieved from the sprinkling requirement. The company was specifically required also to keep the space in and about its tracks free and clear from ice and snow, unless at the option of the borough president it entered into a contract with the city to clean an equivalent amount of street surface from house line to house line. If at any time the company's railway interfered with the construction of public works by the city directly or by a contractor for the city, the company was required at its own expense to protect or remove its tracks or appurtenances until the improvement was completed.

The portion of the grant authorizing the company to operate over the Queensboro Bridge was given for a period of ten years, but it was provided that this privilege "may continue for a further term not exceeding in any case fifteen years, which further term may be terminated at the option of the board (of estimate and apportionment) at any time

during said fifteen years upon six months' notice by the board to the company." The tracks to be used were to be assigned by the commissioner of bridges, who was to have the right to grant to any other individual or company a similar privilege to use the same or other tracks upon the same or other conditions. While the city agreed to install the tracks and all electrical equipment on the bridge at its own expense, the company agreed to maintain the tracks and equipment in good repair, subject to the approval of the bridge commissioner. The type of car to be used on the bridge was also subject to the commissioner's approval, and that official was authorized to adopt rules in regard to the number of cars to be operated on the bridge, the rate of speed to be permitted, the headway to be observed, the type and weight of cars to be used, the switching of cars, the use of platforms and the control of the electric current.

Among the provisions of the South Shore Traction Company franchise still to be mentioned was a clause to the effect that the annual charges or payment stipulated in the grant should continue throughout the whole term of the grant notwithstanding any clause in any statute or in the charter of any other company providing for franchise payments at a different rate, and that no assignment, lease or sub-lease of this franchise or of any portion of it should be valid for any purpose unless such assignment or lease contained a covenant that the assignee or lessee would exercise it subject to all the conditions of this franchise contract. It was further stipulated that "the rights and privileges hereby granted shall not be assigned, either in whole or in part, or leased or sublet in any manner, nor shall the title thereto, or right, interest or property therein, pass to or vest in any other person or corporation whatsoever, either by the act of the company, or by operation of law, whether under the provisions of the statutes relating to the consolidation or merger of corporations or otherwise, without the consent of the city, acting by the board, evidenced by an instrument under seal, anything herein contained to the contrary thereof in anywise notwithstanding, and the granting, giving or waiving of any one or more of such consents shall not render unnecessary any subsequent consent or consents." Moreover, the city reserved the right to require the company to improve or increase its railway

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equipment, including rolling stock, whenever the board of estimate and apportionment thought necessary. The company's general rate of fare was limited to five cents, the maximum permitted under the railroad law within the corporate limits of a city, but on the local bridge service the fare was not to exceed three cents, or two tickets for five cents. Policemen and firemen in full uniform were to be carried free. No freight cars were to be operated on the road, and the rates charged by the company for carrying express matter were to be subject to regulation by the board of estimate and apportionment. Cars were to be well lighted, equipped with proper fenders and wheel guards and heated during cold weather. The company was to submit an annual statement to the board of estimate and apportionment detailing its financial transactions for the year. Its books showing gross earnings were to be subject to inspection by the comptroller for verification of the company's statements.

Elaborate provisions were inserted in this contract, as in other recent franchise contracts granted by the city of New York, providing a system of penalties for failure to give efficient service at the rates fixed in the ordinance or for failure to maintain the company's structures and equipment in good condition throughout the term of the grant. The sum of $250 a day was stipulated as fixed or liquidated damages for every default of the company in any of these particulars, in case such default should remain unremedied for an unreasonable time after notice from the board of estimate and apportionment. The company was required to deposit with the comptroller a fund of $20,000 in money or approved securities upon which the city could draw for penalties inflicted upon the company, or for any necessary expenses in performing work neglected by the company. The penalty for failure to observe the provisions of the franchise relating to headway, the heating and lighting of cars, fenders, wheel guards and the watering of pavements, was fixed at the sum of $50 a day for each day of violation, plus the further sum of $10 a day for each car not properly heated, lighted or fendered in case the complaint related to these matters. The procedure to be followed for the imposition and collection of penalties was set forth in detail. When complaint was made the board of estimate and apportionment was to give the company

notice to appear on a certain day, not less than ten days after the serving of the notice, to show cause why it should not be penalized in accordance with the provisions of the franchise. If the company failed to appear, or after a hearing was judged in default by the court, then the prescribed penalty was to be imposed forthwith, or in cases not covered by the specific penalties set forth in the franchise the board was to fix the amount and, without legal procedure, direct the city comptroller to withdraw the amount of the penalty from the security fund deposited with him. Whenever any drafts had been made upon this fund, the company was required upon ten days' notice to restore it to the original amount of $20,000, or in default of doing so, to be subject to the annullment of the franchise at the option of the board of estimate and apportionment.

The two principal points upon which this franchise was condemned by the public service commission were, first, the excessive payments required for the privilege of building a street railway through a great undeveloped district that would thereby be brought within reach of the congested areas of Manhattan, and, second, the fact that this route which would, after the development of the territory, be a great thoroughfare for traffic was handed over for the period of fifty years as a practical monopoly without any provision for compelling the company to extend its lines and render the service which in every case should be the price of monopoly. In the closing days of the McClellan administration, after the company had secured the confirmation of its rights by the courts, the city took pity on it and agreed to a modification of its franchise by which the original cash payment required was reduced from $20,000 to $1,000, and the annual minimum payments on account of percentages of gross receipts for the first period of twenty-five years were reduced from an aggregate of $267,000 to an aggregate of $157,500. Moreover, the clause in the contract binding the company not to subtract this payment from its franchise taxes, was stricken out by mistake, and when it was too late to readvertise the modification and still put it through before the new board of estimate and apportionment took charge of affairs, the matter was fixed up by the company's making a separate stipulation to the effect that it would not take advan-

tage of the change in this clause. Whether or not this supplementary stipulation is of any validity, is a question that, like many other doubtful franchise questions, cannot be tested until long after the time has passed for mending it. The whole matter of the hasty modification of the South Shore Traction Company's franchise is now in litigation and it is quite possible that the action of the board of estimate and apportionment may be declared void on account of informalities of procedure required by the exigencies of speed.

326. General suggestions as to New York City's present street railway franchise policy.—While the South Shore Traction Company's franchise is peculiar in one or two particulars, it conforms in the main with the standard form of franchises now in use by the city of New York in connection with all new grants. The idea back of this standard form is that the city should receive as large compensation for its franchises as it can exact from the companies. There is a further idea of keeping the company's operations in the streets strictly under municipal control. There is scarcely a glimmer, however, of civic intelligence on the most fundamental of all franchise questions, namely, the creation of a monopoly under either municipal or private operation, but in any case subject to the obligations of monopoly to render a unified service adapted from time to time to the needs of the community. New York's present franchise policy was undertaken at a time when the streets in the built-up portion of the city had already been preëmpted by companies with perpetual franchises. There appeared to be only the fag-ends left for the city to dispose of, and consequently the policy of getting as much as possible out of each little piece was adopted. The clause in the standard form of franchises stipulating that tracks and other street fixtures shall revert to the city without cost, if it wants them, at the end of the franchise period or its renewal, is, perhaps, a short step in the direction of securing ultimate control of the general street railway situation by the city. It is a step in the dark, however, for the experience of the world has demonstrated that it is next to impossible to compel a company occupying the streets to maintain its fixtures in good condition to the last day of the franchise period, when at that time they are to be handed over to the city free, unless definite provision is made for the

amortization of the company's investment and definite control of the disposition of the company's gross earnings is assumed by the city. The failure of New York City's franchise grants to reserve to the city the right to purchase other portions of the street railway plant, leaves the city in a weak condition for undertaking municipal ownership or transferring the tracks to another company for operation. The fact is that on January 1, 1910, there were at least twenty-five different companies operating street surface railways in the city of New York, and the present tendency is for the number to increase rather than to diminish. The railroad law of the state, while honeycombed with special provisions inserted by subservient legislatures upon the request of traction interests, contains no recognition of the theory that street railway operation in a city is a natural monopoly, and the local authorities of the city of New York have taken no effective steps either to change the railroad law in this particular or to overcome the obstacles it presents. New York is still jealous of monopoly, perhaps from the fear justified by experience, that the city government is not likely to be sufficiently powerful and disinterested to compel a great monopoly to respect the public rights and render efficient service at reasonable rates. Sooner or later, a complete readjustment of the New York point of view in regard to street railway franchises is inevitable. By some means or other, the perpetual grants will have to be abrogated, the number of operating companies reduced and the systems unified at least to the extent of bringing the street railway lines of each borough under common control. The Metropolitan Street Railway Company maintained a substantial monopoly in Manhattan for several years, but this gigantic fabric of stock-jobbing and exploitation, constructed on the false theory that the value of a perpetual franchise in the streets of Manhattan is sufficient to support unlimited capitalization, necessarily came to ruin. On account of the existence of the old perpetual franchises, the city's position in any negotiations for a general settlement is much weaker than was the case in either Chicago or Cleveland, with the exception that municipal ownership and operation are legally possible in New York under existing laws. Moreover, the carelessness of many of the companies in the days when they "owned" the town, the legislature

and the courts is believed to have left weak spots in their franchise claims, so that a bold, vigorous and persistent policy of strict construction on the part of the city might bring the companies to their knees and compel them to accept new indeterminate or limited franchises, subject to the right of the city to take over the properties at some future time at actual value. While New York City already has an enormous debt, a recent amendment of the state constitution recognizes the principle that self-sustaining bonds should not be counted in the ten per cent debt limit. This leaves the way open for the gradual establishment of municipal ownership on a conservative basis, and if the policy of requiring in all new franchises that the companies provide for the amortization of their construction capital within a limited term of years were to be carried out, the city could take over the railways at a greatly reduced capitalization and be correspondingly independent of debt-limit restrictions.

CHAPTER XXV.

THE STREET RAILWAY SETTLEMENT FRANCHISES OF CHICAGO AND CLEVELAND.

327. Controlling principles of these two leading settlements.
328. Original street railway franchises in Chicago granted for a period of twenty-five years.
329. The companies struggle for the extension of their franchises.
330. The theory upon which the Chicago settlement was worked out.
331. The provisions of the Chicago franchises bearing upon municipal ownership.
332. Provisions for the continuous upkeep of the Chicago street railway property.
333. Provisions for adequate equipment and first-class service on the Chicago street railways.
334. Rates of fare and compensation to the city as fixed in the Chicago franchises.
335. A board of supervising engineers established to control the financial operations of the Chicago companies.
336. Other measures designed to keep the Chicago companies under continuous public control.
337. Financial results of the Chicago settlement and the outlook for municipal ownership.
338. The Cleveland "low fare" settlement after eight years' war.
339. Powers and duties of the city street railroad commissioner in Cleveland.
340. The arbitration provisions of the Cleveland franchise.
341. Municipal control of street railway service reserved in the Cleveland ordinance.
342. The system of fares and transfers established in Cleveland.
343. Provisions of the Cleveland franchise for determining the cost of service.
344. The capital value upon which the Cleveland company is guaranteed a fair return.
345. The Cleveland purchase clause.
346. Term of the Cleveland franchise and conditions of renewal.
347. Suburban service, the neutral zone, extensions, etc., in the Cleveland plan.

327. Controlling principles of these two leading settlements.—The street railway franchise ordinances of Chicago passed in 1907 and the Cleveland settlement ordinance of 1910 occupy a field by themselves among American street railway grants. They represent the outcome of long-contested local transit situations whose importance and the intelligence with which they were fought out, made them of nation-wide interest. These franchises represent the high-water mark thus far attained in municipal franchise granting in

America. No discussion of street railway franchise conditions in the United States would be at all adequate without an analysis and comparison of these ordinances.

Each of these franchises is based upon three important principles, two of which are common to the ordinances of both cities. One of these common principles is the fundamental necessity of reasserting and retaining public control of the streets. Accordingly, in both cities the franchises make specific and elaborate provisions to guarantee that the question of municipal ownership and operation of the street railways shall remain continuously open, as an alternative to which the people may turn at any time for relief from inadequate service or excessive rates at the hands of private monopoly. Coupled with this reserved right of purchase, which though effective in theory may in practice prove of no avail on account of a city's financial limitations, there is a further provision to the effect that the city may designate a new company which shall have the right to take over the property. In other words, the city reserves the right either to resume the street railway franchises for public operation or to transfer them to other agents.

The second important principle common to the franchises of the two cities is that the capital invested, in good faith, in a street railway system, should be protected. Not only should the investment itself be preserved from destruction, but there should be practically guaranteed to it a moderate but sufficient annual return.

The third principle at the basis of the Chicago franchises is good service at standard rates and a division of the incidental surplus profits between the companies and the city. Chicago suffered so long and so bitterly from inadequate service that the entire rehabilitation of the street railway system came to be the first demand of the public. Comparatively little interest was taken in the question of lower fares. The city preferred to retain the standard five-cent fare, so that it might be sure of good service. In Cleveland, on the other hand, the most conspicuous point of the long struggle of Mayor Tom L. Johnson against the Cleveland Electric Railway Company was for a three cent fare. Consequently the franchise ordinance that marked the settlement of this controversy contained as its third important principle a de-

mand for service at cost. Surplus profits were to be eliminated, not by turning them over to the city in whole or in part, but by an automatic readjustment of rates so as to give to the street car patrons all the possible benefits arising from the operation of the utility. The desire for cheap fares so dominated the situation that the requirements of good service seem to have been somewhat subordinated, no provision whatever being made for street railway extensions except on the company's initiative. The strong and the weak points of the Chicago and Cleveland franchises will appear in detail from the analysis given in the later sections of this chapter.

328. Original street railway franchises in Chicago granted for a period of twenty-five years.—The first street railway ordinance granted by the city of Chicago, on March 4, 1856, was ineffectual. No street railways were constructed under it.[1] On August 16, 1858, however, a franchise was granted to certain individuals which became the basis of the street railway systems in the South and West divisions of the city.[2]

Under this franchise the grantees were authorized to construct a single or double track railway on State street, Cottage Grove avenue, Archer road and Madison street. The tracks were not to be laid within twelve feet of the sidewalks, and the cars were to be operated with animal power only. The tracks were not to be connected with those of any other railroad on which other power was used, and no railway car or carriage used on any other railroad in the state was to be "used or passed upon said tracks." The railway was not to be used for any other purpose than to transport passengers and their ordinary baggage, and the common council reserved the right at all times to make such regulations as to speed and running time of cars as the public safety and convenience might require. The tracks were not to be elevated above the surface of the street and were to be laid with modern improved rails in such a way that vehicles could "easily and freely cross said tracks at any and all points and in any and all directions, without obstruction." The rate of fare was to be five cents, except when cars were chartered for

[1] "Chicago Traction: a Study of the Efforts of the Public to Secure Good Service," by Ralph E. Heilman, in *American Economic Association Quarterly*, third series, volume 9, No. 2, July, 1908, page 1.

[2] "Municipal Grants involved in West Chicago Case," page 1. *See* also "Special Ordinances," pages 1042-5.

a specific purpose. The grantees were to pay one-third of the cost of grading, paving or otherwise improving the streets occupied by their tracks. Indeed, this provision was to a certain extent retroactive; for the grantees were obliged to reimburse the property owners to the extent of one-third of the cost of improvements that had been made after January 1, 1858. The grantees were to be liable for all "legal or consequential damages" resulting from the carelessness or misconduct of their agents in the course of the construction or operation of the railway. The privileges granted, together with the railways so far as constructed, were to be forfeited to the city unless construction was commenced on one of the lines by November 1, 1858, and unless all the routes authorized were completed by January 1, 1863, barring extensions of time granted by the common council or delays caused by injunctions. It was stipulated that the right to operate these railways "shall extend to the full time of twenty-five years from the passage hereof, and at the expiration of said time the parties operating said railways shall be entitled to enjoy all of said privileges until the common council shall elect, by order for that purpose, to purchase said tracks of said railways, cars, carriages, station houses, station grounds, depot grounds, furniture and implements of every kind and description, used in the construction or operation of said railways, or any of the appurtenances in and about the same." In case the city desired to purchase, the council was to pass an order at least six months in advance of the date fixed for taking over the property, and was to pay for it a sum to be determined by arbitration. This ordinance was amended December 20, 1858, so as to relieve the grantees from the necessity of paying one-third of the cost of grading, paving or improving the streets, but so as to impose upon them the necessity of keeping the portion of the street surface occupied by their tracks in repair and good condition during the entire period of the grant.

By a special act of the legislature of the state of Illinois approved February 14, 1859, entitled "An Act to promote the construction of Horse Railways in the City of Chicago," the grantees under the ordinance just described, together with one associate, were incorporated as the Chicago City Railway Company for a period of twenty-five years, and

were authorized to construct street railways in the South and West divisions of the city on such streets and subject to such conditions as might be prescribed by the common council. The privileges already granted by the city ordinances were confirmed, but the company was forbidden to construct more than a single track on State street between Madison and Twelfth streets except with the consent of the owners of two-thirds of the property in lineal measurement fronting upon that portion of the street. This company's franchises were extended to cover other routes by an ordinance of the common council passed May 23, 1859, but the conditions contained in this supplemental ordinance were substantially the same as those contained in the ordinances already described, except that the width of street surface to be kept in repair by the company was defined as eight feet for single track and sixteen feet for double track railways.[1]

In the meantime, on May 23, 1859, a franchise had been granted to the North Chicago City Railway Company for certain streets in the North division of the city.[2] The conditions prescribed in this ordinance were substantially the same as those in the ordinances already described, but the council was not authorized to require the company to run its cars earlier than five o'clock in the morning or later than eleven o'clock at night. There was one other difference between these franchises, and that was of vital importance. While the franchises for the South and West divisions were to continue for a period of twenty-five years and thereafter until the common council saw fit to purchase the railways, it was stipulated in the franchise for the North division that the rights and privileges of the company "shall continue and be in force for the benefit of said company for the full term of twenty-five years from the passage of this ordinance, and no longer." This company's privileges were extended to other streets by an ordinance passed August 11, 1864.[3] Under this extension franchise the company was required to keep on hand a sufficient number of funeral cars with suitable compartments for carrying the corpse by itself, and, on application, was to furnish not more than three cars, unless a larger number was agreed upon, at a

[1] Special Ordinances, pages 1046-50.
[2] *Ibid.*, pages 1415-18.
[3] *Ibid.*, pages 1422-4.

designated point on any of its railways to convey the corpse and the persons attending the funeral to any cemetery to which the company's lines or connections extended. The company was entitled to charge not to exceed two dollars for each corpse and not to exceed twenty cents for a round trip for each person conveyed on a funeral occasion. The company was required to make an arrangement with the companies operating in the other divisions of the city, to receive funeral cars from their tracks and convey them to any cemetery located on this company's lines. The arrangement made with the other companies was to be such that the charge for conveying the corpse from any part of the city on any of the lines of any of the companies should not exceed three dollars, and the charge for persons attending the funeral should not exceed twenty-five cents a round trip. Under this extension ordinance the company was also required to improve or pay for the improvement of eight feet of the roadway for each single track and sixteen feet of the roadway for each double track, whether the improvement was by paving, repaving, planking or replanking.

By a special act of the state legislature, approved February 21, 1861, entitled "An Act to authorize the extension of Horse Railways in the City of Chicago," the Chicago West Division Railway Company was incorporated for a term of twenty-five years and was authorized to "acquire, unite and exercise any of the powers, franchises, privileges or immunities" already conferred upon the Chicago City Railway Company by law or ordinance, on such terms as might be agreed upon between the two companies. Two years later, in 1863, the new company acquired from the Chicago City Railway Company all of the latter's rights, privileges and constructed routes in the West division.[1]

It will be noted that by these various ordinances and legislative acts supplemented by agreement between the companies, the three natural divisions of the city of Chicago made by the Chicago river and its branches, were recognized as three separate territorial units for street railway construction and operation. Franchises in all three divisions had been granted for a period of twenty-five years, but in the South and West divisions the rights of the companies

[1] Hellman, *work cited*, page 2.

were to continue after the expiration of the twenty-five year period until the properties should be purchased by the city. On February 6, 1865, the so-called "Ninety-Nine Year Act" was passed by the Illinois legislature, over the governor's veto. By this act the corporate life of the three street railway companies then in operation was extended from twenty-five years to ninety-nine years. It was supposed that the effect of this act was to extend the company's local franchises for a like period, but this supposition was later proven to be incorrect by decision of the United States Supreme Court filed April 2, 1906.[1]

The passage of the "Ninety-Nine Year Act" in 1865 raised a great outcry against long-term franchises granted by legislative act. As a result the new constitution of Illinois adopted in 1870 contained a provision that "no law shall be passed by the general assembly granting the right to construct and operate a street railroad within any city, town or incorporated village, without requiring the consent of the local authorities having the control of the street or highway proposed to be occupied by such street railroad."[2] Two years later, in 1872, the general city and village law was enacted, with a provision authorizing the city council of any city organized under this act to grant street railway franchises. It was provided, however, that "such permission shall not be for a longer time than twenty years." It was also provided by this act that no local street railway franchise should be granted "except upon a petition of the owners of the land representing more than one-half of the frontage of the street or so much thereof as is sought to be used for railroad purposes." This act became effective, so far as Chicago was concerned, in 1875, when the city voted to accept it as its charter. In the meantime, by "An Act in regard to horse and dummy railroads," approved March 19, 1874, the legislature had in another way put a limit of twenty years upon local street railway franchise grants.

329. The companies' struggle for the extension of their franchises.—The rights of the various Chicago companies were extended from time to time to additional streets, and in 1883, at the expiration of the twenty-five-year period of the original local grants, the companies were given an ex-

[1] Blair v. City of Chicago, 201 U. S., 400.

[2] Article xi, section 4.

designated point on any of its railways to convey the corpse and the persons attending the funeral to any cemetery to which the company's lines or connections extended. The company was entitled to charge not to exceed two dollars for each corpse and not to exceed twenty cents for a round trip for each person conveyed on a funeral occasion. The company was required to make an arrangement with the companies operating in the other divisions of the city, to receive funeral cars from their tracks and convey them to any cemetery located on this company's lines. The arrangement made with the other companies was to be such that the charge for conveying the corpse from any part of the city on any of the lines of any of the companies should not exceed three dollars, and the charge for persons attending the funeral should not exceed twenty-five cents a round trip. Under this extension ordinance the company was also required to improve or pay for the improvement of eight feet of the roadway for each single track and sixteen feet of the roadway for each double track, whether the improvement was by paving, repaving, planking or replanking.

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[1] Heilman, *work cited*, page 2.

to the highest bidder. These bills having been defeated in 1897, the companies, which at that time maintained a sinister control over the Chicago council, secured the passage by the legislature of what is known as the Allen law, conferring upon the city council the right to grant franchises for any period up to fifty years. Public opinion, however, was so strongly against long-term franchises that the succeeding legislature, in 1899, was forced to repeal the Allen law. The repeal was effected before the companies had been able to secure extension franchises from the city. In the meantime the people of Chicago had become greatly aroused, and under the leadership of the Municipal Voters' League a great struggle was commenced to overthrow the power of the companies in the city council. This struggle was so far successful that all propositions looking toward the extension of street railway franchises were defeated and the legislature was finally induced in 1903 to pass the so-called Mueller law, conferring upon any city which should adopt the act by popular vote the right to construct, purchase and operate street railways, or to lease them to private companies for operation. This enabling act was adopted by the city of Chicago and on several occasions the citizens at the polls expressed their desire for municipal ownership. Indeed, it was on the issue of immediate municipal ownership that Judge Edward F. Dunne was elected mayor by a substantial majority in the spring of 1905. The final outcome of the long struggle as crystallized in the traction ordinances now in force in Chicago will be described in succeeding sections.

330. The theory upon which the Chicago settlement was worked out.—When Judge Dunne took office as mayor of Chicago in the spring of 1905, with the mandate from the people to bring about "immediate municipal ownership," the street railway situation in Chicago was still complex. A year later, however, the companies' claims to franchises under the "Ninety-Nine Year Act" were definitely overthrown by the United States Supreme Court. This left the situation such that the right to operate the lines in the South and West divisions, which had been constructed under the original franchises, could be terminated at any time by the city's purchasing the property. The right to operate the lines of the North

division, constructed under the original franchise, had expired absolutely. There were, however, a considerable number of additional lines, for which grants had been made at different times by the city or by former suburban authorities, and on these lines the franchises for the most part had not yet expired. On the other hand, the company operating the lines in the North and West divisions had gone into bankruptcy and the financial affairs of this company and its underlying companies were in almost inextricable confusion. The street railway properties throughout the city had been for the most part let to run down, so that for many years the public had been compelled to put up with execrable service. Many of the old cable lines were still in use. The city was tied hand and foot by the provision of the constitution limiting municipal debt to five per cent of the assessed valuation of property, and by the provision of the law limiting assessed valuations to twenty per cent of full values. The only possible way in which the city could raise the money to take over the street railways was under a provision of the Mueller law authorizing the issue of certificates chargeable exclusively against the street railway systems. But the validity of this provision was uncertain, so that even this one hope for municipal ownership did not rest upon a secure foundation. Under these circumstances, the municipal ownership administration found itself checkmated in an attempt to carry out its program. The upshot of the matter was that Mayor Dunne, realizing the necessity of an immediate improvement in service and also realizing the difficulties that made immediate acquisition of the street railways by the city impossible, formulated in a letter to the chairman of the local transportation committee of the council the main outlines of a policy calculated to pave the way for a settlement. The first principle laid down by the mayor was that the right to undertake municipal ownership at any time should be made absolute and continuing, so that as soon as the financial and legal difficulties were cleared away the mandate of the people could be carried out. The second stipulation made by the mayor was that there should be an immediate improvement of the service. He suggested, therefore, that the first practical step to be taken was to invite the existing companies to indicate whether or not they

would be willing to enter into an agreement to sell to the city all their tangible property and unexpired rights at a price to be then fixed and to undertake immediate improvement of their service, subject to the right of the city to take the property over at any time, upon reasonable notice.

"If they will join, if possible as one company," said the Mayor,[1] "in the reconstruction of their entire system upon plans to be adopted by the City with their concurrence, which shall provide for unified service, through routes, universal transfers and operation under revocable license, then they should be adequately assured of the payment of the value of their present property (to be now fixed before rehabilitation) and additional investment when the City does take over the lines, and they should receive a fair return upon this present and future investment and some share of the remaining net profits while they continue to operate. Subject to these provisions, the profits of operation should go to the city as a sinking fund for the purchase of the property."

Setting to work upon the basis of these propositions, Mr. Walter L. Fisher, the city's special traction counsel, carried on negotiations with the companies, which finally resulted in the drafting of the settlement ordinances adopted by the council and approved by the people early in 1907. In carrying on the negotiations, Mr. Fisher appealed to the supporters of municipal ownership on the ground that under the proposed plan all of the difficulties in the way of the acquisition of the properties by the city would be removed and the price at which the city could purchase the street railways at any time would be definitely fixed. By means of the ordinances the desire and hope for immediate municipal ownership would be translated into a definite and practical scheme by which municipal ownership could be undertaken as soon as the city's financial difficulties were overcome. On the other hand, Mr. Fisher appealed to the companies and to the opponents of municipal ownership for support on the ground that the proposed plan was the only possible one by which municipal ownership could be avoided. He pointed out that if, as they claimed, the sentiment for municipal ownership was the result of bad service and would immediately die out if the companies would themselves give good service, these ordinances would give the companies one last chance to save themselves and to win back public confidence. The logic of the proposition was irresistible, and although the ordinances as

[1] Letter to Alderman Charles Werno, April 27, 1906.

they were worked out and agreed upon met with violent opposition, chiefly from the friends of municipal ownership, the general principles upon which these ordinances were framed could not be successfully attacked. In supporting the ordinances, Mr. Fisher said:[1]

"I believe * * * that the street railway question will never be settled in this city until its citizens are intelligent enough and big enough to unite in support of measures that will sacrifice the principles of none, but will preserve the opportunity for each to advocate thereafter the adoption of that policy with respect to public utilities which he may then think wise.

"It is in no spirit of oratorical exaggeration that I state my conviction to-day that the ordinances now under discussion are of this precise character, and should have the support of every voter who has the real interests of Chicago at heart. In their support the man who believes in municipal ownership and operation of our street railways at the earliest practicable moment can safely unite with the man who does not believe at all in the municipal ownership of public utilities, but who does believe that the reserved right of the City to designate another corporation to take over any particular utility is a proper and salutary means of enforcing efficient service of any such utility in the hands of a private corporation."

For the reasons advanced by Mr. Fisher, and for the further reason that the long struggle between the people of the city of Chicago and the street railway companies had become a matter of national interest, the adoption of the settlement ordinances marked a new era in franchise granting in the United States.

331. The provisions of the Chicago franchises bearing upon municipal ownership.—In taking up the analysis of these complex ordinances, it is perhaps best to group their various provisions around the main principles upon which they were based. First, then, comes the matter of municipal ownership. In these ordinances the city reserved to itself the right, on February 1 or August 1, of any year, after having given six months' written notice of its intention, to purchase and take over for municipal operation the entire street railway system of the city. The purchase price which the city would have to pay was fixed in the ordinances at $50,000,000 as the adjusted value of all the existing tangible property and unexpired franchise rights of the companies, and in addition to this sum, the value of all additions and betterments made

[1] "The Traction Ordinances," an address delivered before the City Club of Chicago, March 2, 1907, and published in *The City Club Bulletin*, vol. 1, No. 8.

subsequent to June 30, 1906, the date of the appraisal by which the value of the property had been fixed. The additions to the purchase price resulting from the construction of extensions and betterments were to be certified from month to month by the board of supervising engineers, a body on which the city was to have one representative, the companies one and the third was to be Bion J. Arnold, as agreed upon in the ordinances. It was stipulated that no contract, subcontract or payment should be made by the company on account of construction, re-construction, equipment, re-equipment, extensions or other betterments to plant or property without the written approval of this board. The company was required to "purchase materials and equipment, and employ engineers, superintendents, clerks, foremen and workmen" and "pay all expenses of every nature, including legal expenses necessary to the proper, complete and prompt performance of the above-mentioned work, upon the lowest advantageous terms and subject to the approval of the said Board of Supervising Engineers." To the amount actually paid out by the company for these purposes, there was to be "added ten per cent of such amount as a fair and proper allowance to the Company for conducting the said work and furnishing said equipment and five per cent for its services in procuring funds therefor, including brokerage." The total amount of these payments, with the percentages added, as certified by the board of supervising engineers from month to month, was to be final and binding upon both the city and the companies, with the exception that any error or omission in the monthly certification might be corrected by the board itself within sixty days after the date on which it had been filed. Under this scheme the city wrote into the ordinances the original purchase price, and the board of supervising engineers each month was to set down in the books the amount of additional capital expenditures to be added to the original purchase price, so that at the end of any month the city would know exactly how much cash would be required, if it desired to take over the property. The board of supervising engineers was given final authority to determine what work should be treated as additions to plant and property, to be charged to capital account, and what should be treated as maintenance, repairs and renewals, to be

paid for out of gross earnings. Certain principles were laid down, however, for the guidance of the board in making this determination. During the first three years after the acceptance of these ordinances, seventy per cent of the gross receipts was to be set apart to be used in defraying operating expenses, including maintenance and repairs, and any residue of this sum was to be applied to the cost of renewals, while the balance of the cost of renewals during this period of "Immediate Rehabilitation" was to be charged to capital account. After the expiration of the three-year period, however, all renewals were to be paid for out of a special fund set aside from earnings, except that in the replacement of any principal part of the property there was to be charged to capital account the excess of the cost of the new property over the original cost of the property displaced, but in the replacement of property contained in the appraisal inventory made prior to the adoption of the ordinances, the value fixed in such appraisal was to be taken instead of the first cost of such appraised property. The companies were bound not to sell any of their property used in connection with the street railways except as such property might become unnecessary or unadapted to the proper operation and maintenance of the street railway systems under the terms of these ordinances. Before making any such sale, they were to obtain the written approval of the board of supervising engineers as to the amount of property to be sold and as to the terms of the sale. The proceeds of any such sale made during the period of "Immediate Rehabilitation" were to be deducted from the amount allowed to the companies for reconstruction, and the proceeds from any sale after the expiration of the first three years were to be added to the reserve fund for renewals and depreciation.

In case the city should determine to purchase the property, it was stipulated that prior to the date fixed for the purchase in the notice required to be given, the board of supervising engineers should make a written estimate of the probable cost of completing any work or equipment provided for in the ordinances, which prior to the date of the notice of intention to purchase had been contracted for by the companies with the approval of the board, and the city was either to assume such contracts and procure the release of the com-

panies from all obligations under them, or else was to deposit a sufficient amount of money to pay the cost of completing the contracts in accordance with the estimates, and the companies were to carry on the work to completion under the supervision of the board, receiving their pay from time to time out of the deposits. If the estimates proved insufficient, a sum sufficient to cover the cost was to be supplied by the city when needed. Upon the deposit of the money required for carrying out uncompleted contracts and upon the payment of the purchase price as shown by the books, or upon the deposit of such purchase price to the order of the company, in one or more of the depositaries authorized by the ordinance, upon the first day of February or the first day of August in any year the city would have the right to take over the entire property free and clear of all liens and claims of every nature, except that the property would be taken subject to the payment of the proportionate part of the taxes for the current year represented by the portion of the year remaining after the date of purchase.

The terms of purchase just described were to apply in the case of purchase by the city for municipal operation. In case the city desired to take over the property without any restriction as to how it should be operated, or in case it desired to designate some other corporation or person as its licensee to take over the property, there was to be added twenty per cent to the purchase price as shown on the books. It was expressly provided, however, that any licensee should not be required to pay the additional twenty per cent of the purchase price, if, before the purchase had been consummated, a binding contract had been entered into between the city and the licensee limiting the beneficial interest of the latter in the property purchased and its improvements to a return of the actual moneys invested, plus a bonus of five per cent, and annual interest on such investment and bonus of five per cent, with the net profits derived from the property in excess of such beneficial interest going to the city. It was expressly provided that any lack of authority on the part of the city to purchase the property at the time of the passage of the ordinances should not be set up as a bar to purchase at a later time in case the city acquired such authority. It was also expressly provided that the right of the city's

licensee to acquire the property under the provisions of the ordinance should in no way be impaired by any lack on the part of the city of the right to acquire the street railway systems for use by municipal operation or otherwise. Moreover, the ordinances expressly provided that no mortgage trust deed or other instrument given by the companies should impose any lien upon their property without such lien being made specifically subject to the limitations and conditions of the ordinances, including the right of the city or its licensee to acquire the property as provided, and that in the event of such purchase the lien of any such mortgage or other incumbrance and all other liens upon the company's property, or any part of it, were to be discharged from the property and were to attach to the proceeds of the sale.

The ordinances were granted for a period ending February 1, 1927, and it was expressly stipulated that nothing in them should be construed as giving the companies a grant extending beyond that date. In case neither the city nor its licensee had purchased the property at the expiration of this period, the city was to have the right to designate a licensee who could then take over the property upon the same terms upon which the city would have the right to purchase it, that is to say, without the payment of a twenty per cent bonus. If neither the city nor its licensee should exercise this right to purchase, but the city should grant to another company the right to operate a street railway in the streets and portions of streets occupied by the companies acquiring rights under these ordinances, in that case the new company would be authorized and required to purchase the property on the same terms upon which the city might purchase it.

It appears, therefore, that under the terms of these ordinances the property could be taken over at any six months' period during the first twenty years either by the city for municipal operation, or by a holding company whose profits should be limited to five per cent on investment, upon the payment of the purchase price fixed in the ordinances, plus the additional sums expended for extensions and betterments as certified from month to month by the board of supervising engineers. Any other company designated by the city could purchase the property at the same price, plus

twenty per cent. At the expiration of the twenty-year period the property could be taken over without the payment of this bonus, either by the city without any limitation as to operation, or by the city's licensee, or by a new company which had been given a franchise covering the same streets. No provision was made, however, as to what should happen if the city did not wish to purchase the property, could not find another purchaser at the price fixed, and was unwilling to renew the franchise of the old companies.

332. Provisions for the continuous upkeep of the Chicago street railway property.—There were certain other provisions in the ordinances calculated to protect the city's interests in case the policy of municipal ownership should be determined upon later. It is obvious that in a settlement which gives a public utility plant a fixed value, not subject to diminution with the passage of time, the chief danger to be guarded against is that the property will be permitted to run down and become less valuable from year to year, while the price remains fixed. To avoid this possibility, the ordinances stipulated that the companies should maintain their street railway systems and their entire equipment, plant and appurtenances, including pavement, in first-class condition. In order to insure the carrying out of this stipulation, the companies were required after the expiration of the three-year period of "Immediate Rehabilitation" to set aside a sum from year to year amounting to not less than six per cent of their gross receipts, to be expended on maintenance and repairs, and if not expended during any particular year to be accumulated in a fund to be expended later for these purposes. The companies were also required to set aside an additional sum equal to eight per cent of their gross receipts as a reserve fund to take care of renewals and depreciation. Out of this fund the companies were to pay for renewals from time to time on the authority of the board of supervising engineers, and any unexpended balance remaining in the fund was to be accumulated for depreciation. In the event of purchase by the city or its licensee, the amount on deposit at the time in either the maintenance and repairs fund or the renewals and depreciation fund, was to be turned over with the property, without additional payment. The ordinances also provided that the companies should at all

times keep their buildings, cars and other insurable property insured to their full insurable value, and in case of the destruction or damage by fire of any of the property, the companies were to restore it or its substantial equivalent at their own cost, or in lieu of such restoration, they were to deposit in the reserve fund for renewals and depreciation the value of the property destroyed as estimated by the board of supervising engineers. In case the amount of insurance received should be insufficient to pay for the property destroyed, the companies were to make up the amount at their own cost, but in case the amount of insurance was greater than the loss the overplus was to be deposited in the fund for renewals and depreciation. As a still further protection to the city, the companies were required to set aside as a separate fund such percentage of their gross receipts as the board of supervising engineers should estimate to be sufficient to protect the company against all claims for damages arising out of injury to persons or property incident to the construction, reconstruction or operation of the railways. The percentage thus reserved could be changed from time to time by the board. This provision was made for the express purpose of providing an available fund sufficient to meet and discharge all legitimate claims for damages, in case the city or its licensee should desire to purchase the property.

333. Provisions for adequate equipment and first-class service on the Chicago street railways.—The second great object which the city had in view in passing these ordinances was the improvement of the street railway service, which through many years of neglect had become intolerably bad. In fact, the property was so run down that it was necessary in these ordinances to provide for the "Immediate Rehabilitation" of the companies' entire systems at a probable cost, as estimated by Engineer Arnold, of $40,000,000, as against a total present valuation of the companies' property and franchise rights on June 30, 1906, of $50,000,000. Indeed, the companies' physical properties as then existing, aside from pavement which belonged to the city and cable scrap which was to be entirely discarded, had been valued by the appraisers at less than $33,000,000, so that the estimated cost of reconstructing and re-equipping the lines was con-

siderably greater than the total value of the physical property then in existence. The companies, accordingly, were required to proceed at once to the reconstruction of the portions of their tracks and roadbed described in exhibits attached to the ordinances and to put their entire street railway systems in first-class condition. All existing cable tracks, slots and conduits were to be replaced with electric tracks. At least 150 miles of single electric track was to be rebuilt. The companies' car-houses were to be rebuilt and re-equipped, and the number of double truck cars in operation was to be increased as rapidly as possible to not less than 2000. In laying or relaying rails on double tracks, the companies were to maintain a distance between track centers of at least 9 feet 8½ inches. All new tracks were to be laid with modern improved rails of the grooved type weighing not less than 129 pounds to the yard, and all rail joints were to be either cast-welded, electrically welded, or of a type that would give an equally smooth and even joint, with a carrying capacity for electric current equivalent to the capacity of the rail. The rails were to be laid on concrete beams, wooden ties, steel ties or cast-iron chairs, or "in some other form of first-class modern approved street railway track construction." The track foundation was to be either of concrete, of crushed stone, or of other ballast material which, in the judgment of the board of supervising engineers, would best suit the conditions of soil and drainage. The design of poles thereafter erected was to be subject to the approval of the board of supervising engineers, and such poles were to be of iron or steel weighing approximately 900 pounds each, set in concrete and kept thoroughly painted. They were to be spaced on an average of 100 to 115 feet apart for straight track, except at street intersections, and their location was to be subject to the approval of the commissioner of public works. All feeder and transmission wires in the central part of the city were to be laid underground. Conduits installed by the companies for this purpose were to be of tile, cement, iron or other material impervious to moisture and not subject to decay, and were to be not more than four feet in width and three feet in depth.

After the expiration of the three year period of general

rehabilitation, the companies might be required from time to time to extend their lines subject to the provision that they could not be compelled to construct more than ten miles of additional double track, or twenty miles of additional single track, in any one calendar year, and subject to the further condition that no extensions could be required in streets nearer than one-half mile to any of the companies' existing parallel street railway tracks. There was a further provision, however, that the companies might be required to make additional extensions, but they were not to be compelled to increase their total capital investment to such an extent that the return on it, over and above the five per cent interest charge allowed by the ordinance, "would be reduced to an inadequate or unreasonably small amount."

The motive power to be used by the companies was the overhead trolley system, but the city reserved the right to require the companies at any time after three years to change to the underground trolley system.

With the idea of making provision for the relief of the surface congestion in the streets of the central business district, the city reserved the right to require the companies to contribute $5,000,000 to the cost of a system of subways to be used as downtown terminals for the street railways. After the completion of this subway system as first laid out, but not before the expiration of five years from the acceptance of the ordinances, the companies might be required to unite with the city in defraying the cost of extensions and additions to the subways, but no such contribution could be required if it would reduce the companies' share of net profits to an unreasonably small amount. It was expressly provided, however, that nothing in these ordinances should be construed as permitting the city to require the companies to abandon the operation of their railways during the life of the franchises on the surface of any streets under which subways should be constructed so long as any street railways were permitted in such streets. In case the capacity of any of the subways constructed under these ordinances should be greater than was required for the use of the companies, the city reserved the right to compel any company operating elevated railways to use the subways to the extent of such surplus capacity and to require the payment of a reasonable rental for such use. Any such rental

was to be apportioned between the city and the street railway companies in proportion to the amounts they had contributed to the construction of the subways so used by elevated railways. But any rental received by the companies from this source was to be considered as a part of their gross receipts under the provisions of these ordinances.

It was stipulated that the companies should forthwith remove all tracks then owned or operated by them which were not expressly authorized by these ordinances. It was also stipulated that if thereafter the companies should cease to operate over any of their tracks, the city council might order them to remove such unused tracks. Cessation of operation was defined as being "failure to operate cars for the carriage of passengers at least once each way within every hour of each day between the hours of six (6) A. M. and eight (8) P. M. over any part of a street or public place in which tracks . . . are laid," unless operation should be interfered with by unavoidable accidents, labor strikes or litigation brought without the connivance of the companies. The city also reserved the right to require the removal of tracks or portions of tracks the further maintenance of which was at any time no longer warranted by traffic or reasonably required in the operation of the street railway system, but no other tracks were to be allowed in the same streets during the term of these franchises.

For the convenience of the public, the companies were required to establish twenty-one through routes as enumerated in exhibits attached to the ordinances, and the city council reserved the right to require the establishment of additional through routes whenever the traffic should warrant it. If, however, the companies were of the opinion that the traffic did not warrant the establishment of such additional routes, the matter might be referred to the board of supervising engineers, whose decision would be binding upon the companies, pending a judicial determination of their obligations in the matter.

The companies agreed to comply with all reasonable regulations of service prescribed by the city council and approved by the board of supervising engineers. All passenger cars were to be used for the carriage of passengers only. All new passenger cars constructed or purchased were to be of a

design approved by the board of supervising engineers, were to have center aisles, were to be without running footboards along the sides and were to be equipped with sufficient motor capacity. Cross-seats facing forward were to be used, except that longitudinal seats with a capacity of four passengers each, might be used at the ends of cars. All closed cars were to be vestibuled and to be of double truck type, seating from forty to fifty passengers each. The companies were permitted to retain in operation until otherwise directed by the board of supervising engineers not to exceed 1301 single truck cars to be selected from the best cars then in service. Cars were to be equipped with electric or hot-water heaters, or heaters of other type approved by the board of supervising engineers, of sufficient capacity to keep the cars heated at a temperature of 50 degrees Fahrenheit as nearly as practicable, and each car was to contain a standard thermometer appropriately placed to enable passengers to see that this requirement was complied with. All cars were to be supplied with electric bells and push buttons in sufficient number to enable passengers, without inconvenience, to notify the conductor of their desire to get out. Each double truck car was to be equipped with two sets of brakes, one a hand brake and the other a power brake, and all cars were to be provided with efficient and serviceable fender devices, headlights and sandboxes. The cars were to be kept clean at all times and kept in repair. They were to be thoroughly ventilated and to be kept well lighted, subject to the approval of the board of supervising engineers. Each car was to carry appropriate and conspicuous signs on both its sides and ends to indicate, both day and night, its route and destination. At night these signs were to be illuminated. The companies were not to be permitted to place advertisements on the outside of cars, but were authorized to use the space between the tops of the windows and the transom on the inside of the cars for this purpose. The companies were authorized to operate funeral cars, and separate cars for the use of the post-office in the carriage of mails. Every electric car was to be in charge of two competent men, a motorman and a conductor, and after the expiration of one year from the passage of the ordinances all cars were to be operated singly.

There should also be mentioned among the provisions of

the ordinances designed to insure continuous and good service from the companies already in possession of the roads, the city's reserved right to designate a licensee at any time, with power to purchase the property.

334. Rates of fare and compensation to the city as fixed in the Chicago franchises.—The way having been cleared by these ordinances for municipal ownership at any time when the city had the will and the means to undertake it, and provision having been made for the complete rehabilitation of the street railway system and for the furnishing of up-to-date service pending municipal ownership, there remained for settlement the supplementary questions relating to rates of fare and compensation. Although during the negotiations there had been some agitation for lower fares, the chief point of the city's long struggle with the companies had been to secure adequate service and a uniform fare throughout the city. These ordinances accordingly provided that for a continuous trip in one general direction within the limits of the city, five cents should be the rate of fare for each passenger twelve years of age or over, and ~~three~~ cents for each passenger under twelve years, except that children under seven, accompanied by a person paying fare, should be carried free. Every passenger, upon demand, was to be entitled to a transfer to any other line of the companies affected by these ordinances connecting with, crossing, intersecting or coming within 200 feet of the line upon which the passenger paid his fare, with the exception, however, that transfers were not to be given in the downtown business district on the surface lines. If a system of subways was completed and put in operation, however, transfers were to be given to connecting lines within the subways. It was stipulated that the payment of a single fare should not entitle a passenger to reverse his general direction of travel, but, wherever necessary to enable a passenger to reach his destination, the companies were required to issue free a transfer upon a transfer. It was expressly stated as the intention of the ordinances that for a single fare the companies should carry any passenger for a single continuous ride over any of the lines operated by them within the city limits, so long as such ride was in the same general direction. Transfers were to be used, however, at the transfer points designated within a reasonable time,

not exceeding fifteen minutes, after the transfer points were reached, or in case no car came along within that time, then upon the first available car. The two big companies to which these franchises were granted were required to arrange for transfers as if they were one company owning substantially the entire street railway system of the city. The companies were authorized to adopt reasonable rules and regulations, not inconsistent with the rules of the ordinances, and subject to the approval of the board of supervising engineers, for the transfer of passengers and for the prevention of the fraudulent use of transfer privileges. The companies were forbidden to issue passes of any kind, and no one excepting employees of the companies and policemen and firemen in full uniform was to be permitted to ride without the payment of the full rate of fare prescribed. The companies were permitted, however, to issue to their employees free tickets for use while in the performance of their duties and might permit such employees to ride free when wearing a badge of the company conspicuously in view. It was further provided that if the United States Post Office should pay the companies a sum of money based upon the system of ticket sales for the use of letter carriers in force during the year 1906, such sum to be not less than $20,243.40 a year, with a proportionate increase with the increase of the number of letter-carriers employed by the Chicago Post Office, then the companies would be permitted to carry letter-carriers in full uniform at all times without payment of fares.

By way of compensation, the companies were required to sprinkle, sweep, keep clean and keep free from snow eight feet of the roadway in and about their tracks on each street occupied by a single track and sixteen feet where there were double tracks. It was provided, however, that in case it was found practicable to have the streets swept and sprinkled their entire width by the companies, or to have the garbage or other refuse removed by means of street cars at night, the companies should perform this service for reasonable compensation when required to do so by the mayor and the commissioner of public works. In no case was snow removed by the companies to be deposited upon the portions of the roadway outside of the tracks, except temporarily during the pleasure of the commissioner of public works. The companies

were further required to grade, pave and keep in repair the portions of the roadway in and about their tracks as above set forth. New paving by the companies was to be done with granite paving blocks measuring from 3½ to 5½ inches in width and from 7 to 11 inches in length, and not less than 5 inches in depth. The specific way in which the blocks were to be laid and the pavement treated was set forth in the ordinances. It was further stipulated that in any case where the ordinances required changing a single track to a double track in a street with a roadway less than 38 feet wide, the companies were at their own expense to widen the roadway to that width, but they were not to be required for this purpose to pave more than eight feet of the roadway in addition to the sixteen foot strip in and about their tracks.

In order to prevent the companies from wasting the earnings of the railways upon high salaries for favored officials and in that way diminishing the net profits of which the city was to receive a share, it was provided that the directors, officers and agents of the companies should be paid for their services out of operating expenses an amount commensurate with the services actually rendered, taking into consideration the compensation paid for similar services by other corporations or enterprises of similar magnitude and of the same general character. The city reserved the right to make specific objection to salaries fixed by the companies and in the event of disagreement with the companies, to require the matter to be submitted to the board of supervising engineers for final decision, subject to the right of either party to apply to any court of competent jurisdiction to pass upon the matter.

In order to provide further for the protection of the city's financial interests, it was stipulated that any contracts made by the companies for power or for construction work should also be subject to the approval of the board of supervising engineers.

With these precautions taken, the companies were to be permitted, after the payment of operating expenses, together with the expense of maintenance, repairs, renewals and personal injury claims and after the payment of taxes and of the salaries and expenses of the board of supervising engineers subsequent to the three-year period of "Immediate Reha-

bilitation," to set aside for themselves a sum equal to five per cent per annum upon the amount of the cash purchase price at which the properties could be taken over by the city. The net profits, after the deduction of this percentage, were to be divided between the company and the city in the proportion of 45% to the company and 55% to the city. The right was reserved to the city, however, to apply its share of the net receipts to a reduction in the rates of fare. In case, however, the fares should be reduced in this way, the companies would be entitled to keep each year as their share of the net receipts, an amount equal to what they would have received if the rates prescribed in the ordinances had been maintained. It was provided also in the ordinances that, subject to action by the city council, the city was to deposit the sums received by it as its share of the companies' net profits to the credit of a separate fund to be used for the purchase and construction of street railways by the city. This clause, however, was intended as a promise to be held out to the friends of municipal ownership, rather than as a binding stipulation of the ordinances, for it was expressly stated that any failure on the part of the city to comply with these provisions should in no way affect the rights or obligations of the companies.

335. A board of supervising engineers established to control the financial operations of the Chicago companies.—The financial problem of the Chicago ordinances was to establish and maintain adequate control on the part of the city during the construction and operation of the street railway system by the companies. For the purpose of maintaining this control, a very important piece of machinery was devised, namely, the board of supervising engineers, to which frequent reference has already been made. One member of the board was named in the ordinances. Within thirty days after the acceptance of its ordinance each company was to appoint an engineer to represent it on the board, and within thirty days after receiving notice of such appointment, the mayor was to appoint the city's representative, subject to the approval of the city council. There were in reality to be two boards of supervising engineers, one under each ordinance. In matters in which both companies were interested, the engineers representing both companies were entitled to member-

ship on the board with half a vote each. Both the city and the companies reserved the right to remove their representatives and appoint new ones from time to time. The city and the companies also reserved the right by agreement to remove the third engineer named in the ordinances, or his successor, and to fill any vacancy in the position of third engineer, from whatever cause it might arise. In case such a vacancy should remain unfilled for a period of thirty days, the persons then acting as judges for the appellate court of the first district of Illinois, were authorized to fill the vacancy by appointing a competent engineer upon the application of either the city or the companies after ten days' written notice to the other party. In case either the city or the companies desired the removal of the third engineer and the appointment of another to take his place, the party desiring such action was authorized to apply to the judges after giving ten days' notice to the other party for the appointment of a day for an informal and summary hearing at which the reasons for asking the removal of the third engineer would be publicly presented by the party desiring such removal. Thereupon the judges would have the authority, in their discretion, to remove the engineer, but they were not authorized to do so except on the application of one of the parties to the ordinances. If the judges of the appellate court should refuse or fail to make an appointment to fill a vacancy in the position of third engineer for thirty days after being requested to do so, either party would have the right to apply to any judge of the circuit court of Cook County to make such appointment. Either party would also have the right to apply to a court of competent jurisdiction for the removal of any member of the board of supervising engineers for fraud, corruption or failure to perform in good faith his duties under the ordinances.

The board was required to maintain an office in the city and to employ the necessary assistance and purchase the necessary supplies and materials to enable it properly to perform its duties. The third engineer was to be chairman of the board by virtue of his office and was to receive a salary of $15,000 a year. The other members of the board were to be paid for their services at the rate of $100 a day and their travelling and living expenses while away from home

and while actually engaged in their official work, it being understood that the total compensation of each was not to be less than $3600 or more than $10,000 a year. The board was to hold monthly meetings and such other meetings as might be called by the chairman, who was specifically required to call a special meeting at any time upon the request of the president of either of the companies or upon the request of the mayor.

During the period of immediate rehabilitation, Bion J. Arnold, so long as he remained a member of the board, was in addition to his duties as such member to act as chief engineer for the work of rehabilitation and receive for such services an additional compensation of $15,000 a year. During this three-year period, the salaries and expenses of the board were to be charged to capital account and thereafter, to operating expenses. The salaries provided for in the ordinances were to be paid the engineers without duplication on account of the double character of the board, and were to be apportioned equitably by the three engineers between the two companies.

As already explained, the board of supervising engineers was given practically complete authority to control the companies' contracts and expenditures, to supervise their construction work and to certify all charges on capital account, as well as to act, as it were, as a general board of expert arbiters to determine any questions that might arise between the companies and the city.

336. Other measures designed to keep the Chicago companies under continuous public control.—Each company was required to file with the city clerk a bond in the penal sum of $100,000, to indemnify the city against damages growing out of the exercise of its franchise. It was expressly stated that nothing in these ordinances should be construed as depriving the city of the right to exercise any police power which it would have enjoyed if the ordinances had not been granted. The city expressly reserved the right to make all regulations "which may be necessary to secure in the most ample manner the safety, welfare and accommodation of the public, including among other things the right to pass and enforce ordinances to protect the public from danger or inconvenience in the management and operation of street railways," and

such regulations "as shall be reasonably necessary to secure adequate and sufficient street railway accommodations for the people, and insure their comfort and convenience." The city council reserved the right to vest all administrative matters under the ordinances, except those vested in the board of supervising engineers, in a department or bureau of local transportation, or in the city engineer, or in any other official or employees of the city.

The companies were required as a further guaranty of continuing control, to file with the city comptroller annual reports according to forms prescribed by that official, showing the character and amount of business done by the companies, and the amount of their earnings and expenses. It was expressly provided that the comptroller, or accountants authorized by him under the direction of the mayor or city council, should have the right to examine the companies' books and vouchers for the purpose of ascertaining the accuracy of the companies' reports and the rights of the city under the ordinances. The board of supervising engineers was authorized to prescribe the form and manner in which the books and accounts of the companies should be kept, subject to the approval of the city comptroller. There was to be an audit of accounts once each year and a formal written report by an accountant selected by the city and the companies, and the cost of such audit was to be paid as an operating expense. The companies were required to maintain their principal offices in Chicago and were forbidden to remove any of their books except bond registry or stock transfer books, or any of their records, contracts or original vouchers beyond the city limits.

The city also reserved the right to forfeit the ordinances under certain conditions. If the companies should make default in the performance of any of the conditions of the ordinances and such default should continue three months, exclusive of time during which the companies were necessarily interfered with by unavoidable accidents, labor strikes or orders of court, then the city council might declare the forfeiture of the franchises. There was a provision, however, to the effect that any such forfeiture should not lie as against a pledgee under any mortgage executed by the companies and falling due prior to the date of expiration of the franchises,

namely, February 1, 1927, on condition that the amount of any such mortgage should not be greater than the entire value of the property as represented by the purchase price fixed in the ordinances. In case of foreclosure, the city was to have the right to bid and become the purchaser. Any new company succeeding to the property at foreclosure sale was to hold it subject to the conditions of the ordinances and subject to the right of the city to purchase it at any time, or to appoint a licensee to make such purchase, but in the case of purchase by a licensee under these conditions, the twenty per cent bonus to be paid by the licensee under other conditions would not be required. In case the companies failed to carry through the work of immediate rehabilitation within the time and in the manner set forth in the ordinances, due allowance being made for unavoidable delays or interruptions, each of the companies so in default was to pay the city the sum of $10,000 a day as liquidated damages during the continuance of such default. For failure to maintain first-class street railway service, the companies were liable to a fine of from $50 to $500 for every such failure, each day of the continuance of the failure being held to be a separate offense.

337. Financial results of the Chicago settlement and the outlook for municipal ownership.—The company having control of the street railways in the West and North divisions of the city was prevented by legal complications from accepting the ordinance until nearly a year after the date of its passage, and consequently there was considerable delay in inaugurating the general rehabilitation of its lines. Nevertheless, on January 31, 1910, at the end of the first three-year period following the date of these ordinances, the capital account of the Chicago Railways Company had increased from the $29,000,000 of the original or basic purchase price to $51,851,308.97. The capital account of the Chicago City Railway Company, which controls the lines in the South division of the city, had increased from the basic figure of $21,000,000 to $38,507,294.18. Disregarding the figures for two minor companies which were brought under the general scheme of the settlement ordinances subsequent to 1907, the purchase price representing guaranteed capital investment in the street railway properties of Chicago has been growing as follows:

June 30, 1906, basic price	$50,000,000.00
January 31, 1908	61,641,192.65
January 31, 1909	75,177,835.32
January 31, 1910	90,358,603.15

The gross earnings of the two big systems and the city's share in the net profits for the first three years under the ordinances have been as follows:

Year ending	Gross earnings	City's share of profits
January 31, 1908	$18,823,094.31	$1,564,618.47
January 31, 1909	19,580,351.74	1,386,877.96
January 31, 1910	21,536.980.32	1,276,252.65
Total for three years	$59,940,376.37	$4,227,749.08

The inclusion in the fixed purchase price of the combined properties of approximately $17,000,000 for paving, cable, scrap and franchise values, without any provision in the ordinances for the writing off of this dead capital, is one of the most serious defects in the Chicago street railway settlement. Soon after the ordinances were passed, the Mueller law, by the terms of which the city had acquired the right to undertake municipal ownership, was interpreted by the highest court of Illinois. It was held that the city could not under the constitution of the state, issue street railway certificates as a lien on the street railway property alone, except within the bounds set by the constitutional debt limit. In the opinion of the court, the provision in the Mueller law requiring that the street railway certificates should be secured by a twenty-year franchise to take over and operate the property in case the city defaulted in its payments, rendered these certificates ultimately a charge against the general credit of the city and, therefore, similar to general bonds. As long as the city of Chicago remains bound hand and foot by its limit of indebtedness which, as already shown, is now fixed by a combination of constitutional and statutory provisions at one per cent of the full valuation of taxable property, it will be utterly impossible for the city to inaugurate municipal ownership of the street railways except by means of a sinking fund accumulated from net earnings or from taxation. Under these circumstances the permanent capitalization of a considerable amount of dead values is a serious handicap, not only because it increases the fixed purchase

price of the properties, but also because it permanently diminishes the net earnings of the street railways.

338. The Cleveland "low fare" settlement after eight years' war.—With the doubtful exception of the Chicago ordinances just described, the new settlement franchise of Cleveland, in effect February 19, 1910, after ratification by popular vote, is the outcome of the most determined and long continued struggle between a city and a street railway monopoly that has taken place in the United States.[1] Tom L. Johnson's unique personality has given the entire country a keen interest in the outcome of the Cleveland fight. The settlement ordinance finally agreed upon between the city and the Cleveland Railway Company, under the tutelage of United States District Judge Robert W. Tayler, is a long and complex contract. Its declared purpose is set forth in two paragraphs of the preamble, as follows:

"It is the common desire of the city and The Cleveland Railway Company to have all the grants of street-railway rights in the city of Cleveland now outstanding surrendered and renewed upon terms hereinafter recited, to the end that the rate of fare may be reduced, the transfer privileges made definite, and the right of the city as to regulation and possible acquisition made certain: and * * *

"It is agreed that a complete re-adjustment of the street-railroad situation should be made, upon terms that will secure to the owners of the property invested in street-railroads security as to their property, and a fair and fixed rate of return thereon, at the same time securing to the public the largest powers of regulation in the interest of public service, and the best street-railroad transportation at cost, consistent with the security of the property, and the certainty of a fixed return thereon, and no more."

339. Powers and duties of the city street railroad commissioner in Cleveland.—An examination of the means provided in this ordinance for securing the objects set forth, reveals many interesting innovations. In the first place, the machinery provided for the enforcement of the city's control and for the solution of problems over which the city and the company may become dead-locked, is substantially new. While the city's ultimate authority in relation to the company

[1] Ordinance No. 16,238-A, entitled "An Ordinance granting a renewal of the street railway grants of The Cleveland Railway Company, fixing the terms and conditions of such renewal grant, changing the rates of fare, regulating transfers and terminating existing grants," passed by the council and approved by the mayor December 18, 1909, accepted by the company December 20, 1909; acceptance ratified by company's stockholders January 26, 1910, and approved by the people at referendum election February 17, 1910.

continues to be vested in the city council, provision is made for the administrative supervision of the company's affairs by a "city street railroad commissioner" appointed by the mayor subject to the approval of the council, and subject to removal by the mayor at any time. This commissioner is to act as the technical advisor of the council in all matters affecting the interpretation, meaning or application of any of the provisions of the franchise.

"He shall keep always informed," says the ordinance, "as to all matters affecting the cost or quality or quantity of service furnished, the receipts and disbursements and property of the company, the rate of fare, the vouchering of expenditures; and if he disapproves of the vouchering of expenditures, or of the manner of keeping accounts, or other matters affecting the bookkeeping of the company, he shall at once take the matter up with the company; and in case of disagreement the matter shall at once be submitted to the committee on standard classification of accounts of the American Street and Interurban Railway Accountants' Association, or to such person or persons upon whom the regulation of such matters may from time to time be devolved by law; and the decision of such committee, or person or persons, not inconsistent with the provisions of this ordinance, to whom this question is thus submitted, shall be final."

The commissioner is given authority, pending action by the council and to meet emergencies, temporarily to approve changes in schedules or routes proposed by the company. It is provided that he shall have access at all times to the accounts, vouchers, documents, books and property of the company relating to receipts, expenditures and business done in the operation of the railway, with full authority to inspect, audit and verify them. The company is required to furnish the commissioner monthly reports of its car mileage and earnings, and such other statements and reports as he may from time to time demand. If at any time the commissioner notifies the company that in his judgment any laxity, carelessness or inefficiency exists in the collection of the company's revenues, or in permitting free transportation, or that there is any wastefulness in the purchase of materials, or in the employment of persons or their compensation, he will have authority to employ such assistants as he may need to determine the facts. In case he finds anything wrong as a result of such investigation, the evil must be corrected at once, or if a dispute arises in regard to the results of the investigation, the matter will be referred to arbitration. The

company is required to furnish the commissioner suitable room in connection with its general office, with the necessary furniture, stationery and supplies, and to pay the commissioner's salary and expenses as an operating charge against the railway. The commissioner's salary is to be fixed by the city council, but is limited to $1000 a month. The commissioner may employ all the assistants he deems necessary "to enable him at all times to inspect and audit all receipts, disbursements, vouchers, prices, payrolls, timecards, papers, books, documents and property of the company," and may fix the salaries of the persons employed by him. The aggregate amount of these salaries, not including his own however, is limited to one per cent of the fund set aside under the terms of the ordinance to meet the operating expenses of the railway. But the expenditures authorized by the commissioner are subject to the approval of the council. Whenever any extension, betterment or permanent improvement of the railway is proposed, the commissioner has the right to employ such assistants as he may deem necessary for the purpose of checking over the company's estimates of the work, and if the work is actually undertaken, he may employ assistants for the purpose of checking materials, labor and other costs in connection with the improvement. The expenditures of the commissioner authorized for this purpose are outside of the limit prescribed for the ordinary expenses of his office. These extra expenses are limited, however, to one per cent of the estimated cost of the improvement, and are to be treated as a part of that cost. In case the improvement is not carried through, the commissioner's expenses in checking over the estimates are to be paid out of the company's interest fund, but not to be charged against operation. It is expressly stipulated that if the provisions of the ordinance for the appointment of the city street railroad commissioner should be held invalid, or if at any time there should be no such commissioner, the city would be authorized to designate the city auditor or any other of its officers or employees to perform the duties of the commissioner as set forth in the franchise.

340. The arbitration provisions of the Cleveland franchise.—The ordinance provides an elaborate scheme for submitting disputed questions to arbitration. It is provided that

either the company or the city may compel a resort to arbitration in regard to any matter which may be lawfully arbitrated and which is not expressly excluded from arbitration by the terms of the ordinance. In every case the party demanding arbitration is required to name its representative and notify the other party of the question to be arbitrated. The other party must name its representative within ten days thereafter, or in case of failure to do so, the party demanding arbitration will have the right to name the second arbitrator. Within ten days after the selection of the second arbitrator, the two already chosen are required to select a third. If they are unable to agree upon a third arbitrator, then on the application of either of them the third arbitrator may be appointed by the person who is United States judge of the district in which Cleveland is situated, but in such a case five days' notice of the application must be given to the other party by the party applying, and in such application the question to be determined by the board of arbitration must be formulated. Before making any final appointment on such application, the judge is required to give both the company and the city three days' notice of the person or persons being considered by him, and either party is entitled within that time to present objections to any person under consideration. A board of arbitration appointed under these provisions of the ordinance must decide within thirty days after the appointment of the third arbitrator the questions submitted for decision unless the arbitrators agree unanimously to an extension of time. If no such extension is agreed upon and no decision is reached within the time prescribed, either party may apply to the judge for the removal of the third arbitrator and the appointment of a new one. In case the person who is district judge for the time being is disqualified or refuses to act, it is provided that any United States circuit judge of the circuit in which Cleveland is situated, may appoint the third arbitrator. The expenses of the arbitration, including the fees of the arbitrators, are to be fixed by the board of arbitration as a part of the award, and are to be paid by the company out of operating expenses, except that if the expenses of arbitration should exceed $5000 in any period of six months, all above that amount must be paid out of the interest fund. The findings of the board of

arbitration are to be binding upon both parties. If the company fails to carry out in good faith any award made by arbitration, provision is made for penalizing the company by reducing the fixed rate of interest allowed on its investment. The extent of such reduction, which is limited, however, to one per cent, is to be fixed by the arbitrators themselves. The scope of the matters that may be referred to arbitration is described in the most broad and general language, and also there are several important questions which are specifically required by the terms of the franchise to be submitted to arbitration in case of dispute.

341. Municipal control of street railway service reserved in the Cleveland ordinance.—The extent to which the city may control the service rendered by the company is carefully prescribed. The construction, rolling stock, equipment, maintenance and operation of the street railway are to be subject to the general street railway ordinances in force at the time of the grant, except as modified by the terms of the grant itself, and are to be subject to future ordinances and regulations of the city not inconsistent with the terms of this grant. The company is required to use cars of modern design, equipped with such improvements and appliances as the city may deem necessary and proper for the safety, convenience and comfort of the passengers and the public. The company is required to run its cars in such numbers and at such intervals of time and under such rules and regulations as the city may from time to time require, subject to the financial limitations outlined in the scheme for insuring an adequate return upon capital invested. The city reserves to itself the entire control of the service, with the right to fix schedules and routes, including routes and terminals of interurban cars, and with the right to determine the character of the cars and to increase or diminish the service, on the sole condition that the council may not require service to an extent which at the maximum rate of fare permitted under the ordinance would not produce enough money to pay operating expenses, interest on the company's bonds and the six per cent return on the balance of its capital as fixed by the terms of the franchise. If the company disputes any resolution or ordinance of the council regulating service on the ground that it will not meet these financial requirements, the service

is to be installed at once, but the question of its continuation may be submitted to arbitration. If the arbitrators decide that the service required cannot be furnished on the conditions specified, the company will have the right to cease obeying the order or resolution and may recoup any losses sustained during the enforcement of the order in such manner as may be fixed by the arbitrators. The company is authorized to carry mail for the United States government and may operate funeral-cars, observation-cars, express-passenger service and other special cars, and may transport tools, materials and supplies needed for the construction, maintenance and operation of the road, but the operation of special cars is not to be permitted to interfere with the carriage of passengers and is to be subject at all times to regulation by the council. The company is also required to operate hospital-cars and supply-cars for the city, and such other cars for exclusively municipal purposes as the city may direct, but all such cars are to be furnished by the city and the bare cost of operation, including the salaries of employees and the cost of current, but not including any contributions for fixed charges or track maintenance or renewal, is to be paid by the city.

342. The system of fares and transfers established in Cleveland. — The Cleveland ordinance, as is well known, is the outcome of a long and bitter conflict, in which the immediate purpose of those representing the city has been to secure lower fares, and the immediate purpose of those representing the old company has been to secure a certain and liberal return upon as large a capitalization as possible. These conflicting purposes and the compromises made with the view of reconciling them permeate the franchise. The rate schedule prescribed is experimental and complex. During the first eight months of operation under the ordinance, and until the lines have been fully equipped with pay-enter cars for a period of three months, the rate of fare is to be three cents cash, with one cent additional for a transfer. The payment of a single fare will entitle a passenger to a continuous ride within the present limits of the city of Cleveland in one direction over any of the company's routes. When the passenger pays his fare he may demand a transfer ticket which will enable him to make a continuous journey on any other of the company's routes except in a substantially opposite

direction parallel to the route on which he started. He must use his transfer, however, within five minutes after leaving the car on which he has paid a fare, or in case no car is available within five minutes, then on the first car that comes along at the transfer point. It is also required that transfers be made at the first point of intersection of the two routes reached by the car on which the fares have been paid. Where two or more routes are operated regularly on the same street, passengers who are able to reach their destination by one of the routes, have no right to take another and demand a transfer. There is also provision for a transfer upon a transfer without additional charge to any one of three cross-town lines. Reasonable regulations to prevent the misuse of transfers may be made by the company, subject to the approval of the city council. One child under six accompanied by an adult must be carried free, but an adult accompanied by two children under six will have to pay one fare for the two. The company is required to proceed immediately upon the taking effect of the ordinance to extend the pay-enter system of fare collections, and, if it is able to raise the necessary money, must have at least 450 pay-enter cars in service within five months, and within eighteen months from that date must have all its cars operated as pay-enter cars, except that it may continue to use as trailers not more than 100 small open cars already owned by it. A pay-enter car is defined in the ordinance as a car equipped with a fare-box and so arranged as effectively to provide for the prepayment of fares. The company is required to carry policemen and firemen while in uniform and on duty free of charge, but is not permitted to give free transportation otherwise except to motormen, conductors and inspectors of the company in uniform, and to other employees not in its general office while on duty or while going to or returning from work. The company is required to adopt all reasonable protective measures to provide for the collection of fares.

The general regulations in regard to free transportation, continuous rides and the collection of fares apply, no matter what rate may be enforced. As a matter of fact, however, the ordinance provides ten schedules of rates of which the one to be given an eight months' trial at the outset is No. 5 in the downward scale. These rate schedules, of which

the first is prescribed as a maximum rate, are as follows:

(a) Four cents cash fare, seven tickets for twenty-five cents (25c.), one cent (1c.) transfer, no rebate.
(b) Four cents (4c.) cash fare, seven (7) tickets for twenty-five cents (25c.), one cent (1c.) transfer, one cent (1c.) rebate.
(c) Four cents (4c.) cash fare, three (3) tickets for ten cents (10c.), one cent (1c.) transfer, no rebate.
(d) Four cents (4c.) cash fare, three (3) tickets for ten cents (10c.), one cent (1c.) transfer, one cent (1c.) rebate.
(e) Three cents (3c.) cash fare, one cent (1c.) transfer, no rebate.
(f) Three cents (3c.) cash fare, one cent (1c.) transfer, one cent (1c.) rebate.
(g) Three cents (3c.) cash fare, two (2) tickets for five cents (5c.), one cent (1c.) transfer, no rebate.
(h) Three cents (3c.) cash fare, two (2) tickets for five cents (5c.), one cent (1c.) transfer, one cent (1c.) rebate.
(i) Two cents (2c.) cash fare, one cent (1c.) transfer, no rebate.
(j) Two cents (2c.) cash fare, one cent (1c.) transfer, one cent (1c.) rebate.

343. Provisions of the Cleveland franchise for determining the cost of service.—The theory of the ordinance is that transportation within the limits of this rate schedule should be furnished at cost. The means provided for determining cost are elaborate and interesting. In the first place, the current receipts of the company are divided into three funds, namely, (1) expense fund; (2) maintenance and renewal fund; and (3) interest fund.

(1) Into the expense fund is to be paid 11½ cents per car mile for each revenue mile made by cars equipped with motors, exclusive of construction and repair cars, and 60% of that amount for each car mile made by a revenue trailer. In case the city establishes a schedule on any car line requiring the operation of more cars during any hour in the day than twice the number of cars operated per hour on the base table for that line, an additional car mile allowance must be made to the expense fund for the cars so operated, to meet the increased cost, if any, of such excess operation. In case of disagreement in regard to the matter, the question is to be submitted to arbitration. Out of the expense fund the company must pay its operating expenses, insurance, claims for damages and miscellaneous expenses, but not more than $1000 per month may in any event be paid out of this fund for any

extension, betterment or permanent improvement. All expenditures from this fund for extensions, betterments or permanent improvements must be reported monthly to the city council. If such extensions are approved by the council the money will be replaced by new capital and paid into the interest fund; otherwise, the expenditures will be charged to operating expenses. Among the operating expenses which the company is required to meet, is the maintenance of the pavement within a space seven feet in width for single track and for double tracks the entire space between the tracks and the rails and for one foot on either side, but not exceeding a maximum width of eighteen feet, except about curves, special work and where there are more than two tracks in the street. One section of the ordinance provides that the salaries of persons employed by the company who receive $1,500 a year or more shall not be in excess of the salaries paid for similar work by other properties of the same relative size. As an offset to this limitation, if indeed it may be considered as a real limitation, it may be noted that there is no provision in the ordinance giving the city control of the company's contracts for power, if it should make any, except indirectly in connection with the limitation put upon the company's allowance for operating expenses.

(2) Into the maintenance and renewal fund there is to be paid four cents per car mile during the six months from December to May, inclusive; six cents per car mile during the five months from June to October, inclusive, and five cents per car mile during November. Any portion of this fund not needed for immediate maintenance or renewals is to be accumulated and may from time to time be invested in the bonds of the company or in the payment of its floating indebtedness, so far as that is a part of the company's capital value. To make the investment of this fund easy, it is expressly provided that in any bonds issued by the company in the future the call price must be stipulated. It is required that the bonds may be redeemed at any interest maturing period on ninety days' notice at 105. Whenever any amount invested is needed for maintenance or renewals, the company must issue new mortgage bonds or incur a new floating indebtedness to the amount of the investment, with the interest that would have accrued upon it, in order to replenish the

fund. In case the car mileage allowance for the expense fund and the maintenance and renewal fund should prove to be either excessive or insufficient, they may be increased or decreased from time to time by an agreement between the company and the city, or in case of disagreement, by arbitration. It was expressly stated as the intent of the ordinance that the maintenance and renewal fund should be sufficient to enable the company to maintain, renew and keep its railway system and property, including future extensions, betterments and permanent improvements in good condition, thorough repair and working order at an average standard for the entire system of 70 per cent of its reproduction value.

(3) Into the interest fund is paid all surplus earnings over and above the allowances credited to the expense fund and the maintenance and renewal fund. There is also paid into the interest fund any surplus remaining from the expense fund at the end of every six months' period. It was provided that upon the taking effect of the franchise ordinance the company should place in the interest fund the sum of $500,000, less prepaid accounts and plus accrued accounts. This fund was to be deposited separately from the company's current receipts, and the interest on deposits accruing from this fund was to be credited to it. Out of the interest fund must be paid all taxes, interest and dividends.

In the scheme of things provided by this ordinance, the interest fund is to be the pulse by which the street railway doctors are to determine the condition of the company from time to time and thereby to readjust, if necessary, the patient's regimen. If at the end of the first eight months' trial of the three cent fare as set forth in rate schedule "e," it is found that the interest fund has become depleted by the charges for taxes, interest on bonded debt and the dividends allowed, this fact will be considered as *prima facie* evidence that the rate schedule in force is too low. Thereupon the company must install the next higher rate of fare, unless in its opinion even that will be inadequate to restore the balance in the interest fund and meet the current charges against this fund, in which case, with the consent of the city, the company may install any rate of fare up to the maximum schedule allowed by the ordinance. If the city and the company cannot agree as to what schedule shall be installed, the question is

to be submitted to arbitration. Any such higher rate established by agreement or by award will continue in force for six months. Thereafter, whenever the amount credited to the interest fund, less the proportion of accrued payments to be made from it, falls as low as $300,000, or rises as high as $700,000, this fact will be *prima facie* evidence of the necessity of changing the rate of fare to the next higher or the next lower schedule, as the case may be. If either the city or the company desires to have the rate of fare changed otherwise than in the manner already described, the party desiring the change must give written notice to the other, stating the increase or decrease desired. If the other party assents, the change requested will be made. In case of disagreement, the matter will be submitted to arbitration. In determining the amount in the interest fund at any given time, deductions for "accrued proportionate payments," are to be made according to varying percentages of the aggregate annual charges against the fund. These percentages are fixed in accordance with estimated monthly surplus earnings as follows: for January, 7%; for February, 6%; for March, 7%; for April, 8%; for May and June, 9% each; for July and August, 10% each; for September and October, 9% each; for November and December, 8% each.

344. The capital value upon which the Cleveland company is guaranteed a fair return.—The "capital value" allowed to the company at the time of the passage of the ordinance, for the purpose of determining rates, and for the purpose of fixing the price at which the property could be taken over by the city, was set forth in the ordinance, subject to certain modifications, and the principles were laid down on which increases and decreases of capital value should be made in the future. The ordinance is specific in declaring that nothing contained in it shall be deemed a limitation upon the amount of capital stock that may be issued by the company or the amount of indebtedness that may be incurred by it, the sole purpose of the capital valuation fixed in the ordinance being to furnish a basis for determining the return to be allowed the company from the carriage of passengers, the rate of fare and the price at which the property may be bought. The capital value as set forth in the ordinance is made up of the following items:

(a) The company's bonded debt aggregating $8,128,000.
(b) The company's floating debt, made up as follows:
1. Bills payable, aggregating $1,288,000 as of January 1, 1908, less any amount that may have been paid before the ordinance went into effect.
2. Whatever sum, if any, may be needed to be added to the money on hand to make up the $500,000 to be put in the interest fund as a starter.
3. All the outstanding debts of the Municipal Traction Company, the Forest City Railway Company, the Low Fare Railway Company and the Neutral Street Railway Company, including any claims liquidated in the future, less any cash that may be on hand after setting aside the $500,000 interest fund.
4. A sum equal to 7½% on the par value of stock guaranteed by the Municipal Traction Company while it had control of the property as the lessee of the Cleveland Railway Company, and a further sum, not exceeding $50,000, to be paid equitably to persons who had disposed of their stock held under such guaranty.
5. An amount equal to the par value of the outstanding capital stock of the Neutral Street Railway Company.
6. All then existing debts of the Cleveland Railway Company; also all then existing claims against the company that might thereafter be liquidated; also one quarter's dividend, or 1½% on $14,675,600, less any amount paid by the Municipal Traction Company to the stockholders of the Cleveland Railway Company for dividend on or about October 1, 1908; also 6% interest upon the "residue" of the capital value of the Cleveland Railway Company as set forth under "c," from January 1, 1910, to the taking effect of this ordinance.
7. All claims against the receivers which the company may be required by order of court to pay.

(c) The sum of $14,675,600, being the valuation awarded by Judge Tayler to the company's stock. This particular amount was arrived at by subtracting the amount of the company's bonded indebtedness plus its floating indebtedness as reported as of January 1, 1908, from a total of $24,091,600, made up of the following items:
1. Value of the Cleveland Railway property, $21,127,149.53.
2. Value of the Forest City Railway property, 1,805,600.00.
3. Eighteen months' unpaid dividends at 6% per annum on the value of the capital stock of the Cleveland Electric Railway Company as agreed upon in the former settlement of April, 1908, which was overthrown by the referendum, $1,158,300.00.
4. Addition agreed upon to equalize stock value, $550.47.

It will be seen, therefore, that the company started out under the new franchise with a fixed capital value of $22,803,600, plus the amount of the company's floating indebtedness and other allowances under "b." Upon that por-

tion of the company's capital value represented by bonded debt, the company was to be allowed a 5% return out of the interest fund for the purpose of paying the interest prescribed in the mortgages securing the bonds. Upon the amount of the company's floating debt and the other items in "b," and upon the residue of the company's capital value as set forth in "c," the company was to be allowed a return of 6%, to be paid out of the interest fund.

The company may at any time refund its bonds or capitalize or issue bonds for its floating debt and other obligations as defined in "b," but all bonds hereafter sold by the company must be sold at the best price obtainable and must contain a provision making them payable on ninety days' call at any interest maturing period at 105 and accrued interest. The city must be given thirty days' advance notice of all proposed sales of bonds. Upon the refunding of its bonds, the company will be allowed from the interest fund the same rate, not exceeding 6%, which the refunding bonds may bear. The company may without the city's consent issue and sell its capital stock or increase its bonded or floating debt, but no such increase in capital stock or indebtedness will be considered as a part of the company's capital value unless such increase is made pursuant to the provisions of the franchise or with the consent of the city.

There is to be added to the capital value from time to time the par value of bonds or stock sold or debt created for extensions, betterments or permanent improvements authorized by the city, but the company may not sell its capital stock for less than par or its mortgage bonds for less than par except with the city's consent. The ordinance provides specifically that 75% of the cost of reconstructing or remodeling the company's existing cars so as to make them pay-enter cars and the entire cost of new pay-enter cars shall be added to capital value. In case any of the company's property represented in its capital value is sold, the proceeds may be used in the payment of floating indebtedness or may be deposited with the trustee under any mortgage issued by the company. In the construction or acquisition of any extension, betterment or permanent improvement, the sums so placed on deposit with the trustee must first be used.

The words "extensions, betterments and permanent improvements" in contra-distinction from "repairs, maintetenance, renewals and replacements of property" are defined as meaning "the acquisition, construction and equipment of additional lines of street railway, power-houses, switches, sidings, car-houses, shops, rolling stock, machinery and other property, or additions to existing equipment, or difference between cost of new sources of power or new methods of propulsion and the cost of the source of power or method of propulsion replaced, if new at the time of replacement, and all expenses incident to such construction and acquisition; and also, wherever any property of the company is replaced by other property at a greater cost than would be the first cost of such property, if purchased at the time of replacement, then such excess cost shall be deemed an extension, betterment or permanent improvement within the meaning of those words as used in this ordinance." In case of disagreement in regard to the matter, the question of what proposed expenditures of the company are for extensions, betterments and permanent improvements, will be submitted to a board of arbitration.

345. The Cleveland purchase clause.—One of the most vital portions of any street railway franchise is the purchase clause, or the clause setting forth the status of the company at the expiration of the grant. In this Cleveland franchise, the right is reserved to the city, upon giving six months' previous written notice, to purchase and take over the company's entire street railway system, including its suburban lines, by paying the capital value of the property as fixed by the ordinance plus a bonus of 10%, and upon assuming in addition thereto, all the obligations, indebtedness and liabilities of the company other than its bonded indebtedness. Upon taking the property over, the city may assume the company's bonds if the law permits, or may purchase them if the law authorizes the purchase and the bonds are callable, or may take the property subject to the company's outstanding bonds. To the extent, however, that the city assumes either the floating or the bonded indebtedness, or takes the property subject to such debt, the amount of the debt is to be subtracted from capital value before the addition of the 10% bonus which the city is required to pay.

The company agrees that if the law permits purchase and the city exercises its option to purchase, it will execute and deliver to the city a good and sufficient deed conveying a good marketable title to its railways, property and franchises, including cash on hand and in the interest fund less enough to pay accrued and unpaid dividends at the rate of 6%, subject, however, to the outstanding obligations of the company. The company agrees that if its current obligations, indebtedness and liabilities then liquidated, except for extensions and permanent improvements, due at the time of the purchase, exceed a sum equal to 10% of the company's gross receipts for the preceding calendar year, such excess shall be deducted from the capital value in determining the purchase price of the property.

If at the expiration of the grant, the city has not purchased the property and has not designated another purchaser for it, it may, if the law permits, take the property, including its additions and betterments inside the city limits as they may exist at the time, at a price and upon terms to be agreed upon between the city and the company, or in case of disagreement to be determined by arbitration. It is to be noted that if the city exercises this option, the purchase price will be fixed independently of the amount of the company's capital value as set forth in the ordinance. The principles upon which the appraisal shall be made are set forth, however. The price is to be the value of the property for street railway purposes, being the estimated cost of reproduction less a reasonable allowance for depreciation, plus 10% as a bonus. All the physical property within the city limits used in the operation of the railway must be included. Separate itemized schedules with values are to be made under six different titles as follows: (1) land; (2) power plant; (3) all other buildings; (4) track equipment and pavement, to the extent that pavement is included in the company's capital value; (5) rolling stock; (6) miscellaneous. No franchise value is to be included, and no payment is to be made on account of the amount in the interest fund at the time, which in case of purchase will become the property of the city. In case it desires to purchase the property under this procedure, the city must give notice and name one arbitrator at a time not more than

eighteen months nor less than twelve months prior to the termination of the grant. The city, however, reserves the right to refuse to take the property at the valuation fixed by arbitration.

If the city is unwilling or unable itself to purchase the property, it may at any time after January 1, 1918, designate a licensee who shall have the right to take over the property in the same manner as the city might purchase it, subject to the condition that such licensee will agree to accept a smaller return by at least one-fourth of one per cent upon what is described as the "residue" of the capital value after deducting the amount of the company's bonded and floating indebtedness, than the return then provided for under this ordinance. A certain procedure, however, is prescribed in case the property is to be turned over to a licensee. The city must fix a time for receiving bids and give thirty days' public notice of it. Any applicant other than the existing company must with his proposal deposit the sum of $50,000 in cash as a guaranty of good faith. If the existing company makes no proposal, it will be deemed to propose the rate of return then authorized under this ordinance. If it proposes a lower rate which is as low as any other offered, its bid must be accepted, unless no other proposal is filed or the licensee designated by the city under a lower proposal fails to purchase the existing company's property. In either of these cases the existing company's proposal must be disregarded. If a licensee is designated and he fails to make good, unless prevented by legal proceedings over which he has no control, such failure is to be declared by resolution of the council, and out of the defaulting bidder's $50,000 deposit there is to be paid to the company any loss or expense which in the opinion of the council has been incurred by it in connection with the filing of proposals, and the balance of the money is to be forfeited to the city.

If at the expiration of the franchise no extension or renewal of the franchise period has been granted, and the city does not choose to purchase the property, any person who may be given a franchise over the company's then existing lines, or any of them, must purchase the railroad or such portion of it, at an appraised valuation, plus a bonus of 10%.

If the city has not purchased the property by January 1, 1938, it may on that day, having given one year's previous notice, take over the St. Clair Avenue line separate from the rest of the system at an appraised valuation plus 10%, or [illegible] ever.

Term of the Cleveland franchise and conditions of renewal. [illegible] extends to May 1, 1934, [illegible] certain curious and complex [illegible] extension of this period. If at [illegible] within fifteen years of the ex- [illegible] company having secured a renewal [illegible] terms, or upon terms acceptable [illegible] for the terms of the franchise to [illegible] teen years of its franchise life at [illegible] provided in the ordinance, without [illegible] under these circumstances when- [illegible] interest fund amounts to more than [illegible] \$500,000 must be applied to the [illegible] by the payment of outstanding [illegible] by the payment of outstanding bonds, [illegible] sinking fund, and in case the city or [illegible] purchase the property either [illegible] deduction of the grant, any such deduction [illegible] would go to reduce the purchase price. [illegible] should at any time pass a renewal or- [illegible] life of the franchise to a point more [illegible] in the future and imposing no substantial [illegible] upon the company, and if the company [illegible] except such renewal ordinance, then it will [illegible] the maximum fare and will again be- [illegible] the scheme of fare regulation provided in the [illegible]. It is stipulated that any renewal ordi- [illegible] deemed not to impose any substantial addi- [illegible] upon the company if it is in identical terms [illegible] ordinance except as to the time of expira- [illegible] because it makes the right of the city to purchase the [illegible] at an appraised valuation continuously operative [illegible] January 1, 1918.

Suburban service, the neutral zone, extensions, etc., in the Cleveland plan. The Cleveland settlement was com- [illegible] the existence of certain franchise contracts be-

tween the company and some of the suburban communities. The settlement ordinance, so far as the uniform schedules of fare are concerned, applies only to the present city limits; so far as purchase is concerned, before the expiration of the grant, it applies to the company's entire system; so far as purchase at an appraised valuation at the expiration of the grant is concerned, it applies to the city limits as they may exist at that time. The company is required, however, to operate its Broadway line to Garfield Park, outside of the city limits, at the same rates of fare charged within the city. The company is authorized during the continuance of this franchise to maintain its already existing suburban lines, but the cost of extensions, betterments and improvements upon existing suburban lines, or the cost of constructing additional suburban lines may not be included in capital value, except with the consent of the city. The company is to perform its existing contracts with municipal corporations and boards of county commissioners relative to its suburban lines, but is not permitted to increase its service above or reduce the fare below the requirements of the existing contracts.

The company may accept new grants or renewals of existing grants for the operation of suburban lines, but if it does so, the amount deducted from car mileage receipts for operating expenses so far as operation under any such new or renewal grant is concerned, may never exceed the gross receipts from operation under it, less the distributive share of the company's taxes which should be paid upon such suburban property. In no case is the car mileage allowance for operation within the city to be increased on account of any deficiency in suburban operation. But any later surplus of gross receipts on suburban lines may be used by the company to reimburse itself for an earlier deficiency. After any such deficiency has been made good, the company, with the approval of the council, may add to its capital value the then value of the property used on any such suburban extensions, betterments or permanent improvements, but the right to include such property in capital value must be determined by agreement and is not to be subject to arbitration.

There are several other interesting provisions in this ordinance which, however, may not be considered as being among its main features. There is a provision that the accounts

of the company shall be kept in its office "open to inspection at all reasonable times," but it is not clear that this publicity is intended for the eyes of anyone but the city street railroad commissioner, whose powers have already been described.

The ordinance also provides for a neutral zone extending approximately one and one-third miles along the lake front and an average of about one mile in the other direction. Within this zone are a considerable number of tracks, for the most part upon viaducts, owned by the city, for the use of which the company is required to pay $3,000 a year as rental, subject to future adjustment by ordinance. But the annual rental may never be fixed so as to exceed an amount equal to 6% on the city's investment in these tracks and the appliances that go with them. Within the neutral zone the city reserves the right to grant to any other person or corporation the right to the joint use of this company's tracks, appurtenances and current, upon such reasonable terms and conditions as the council may prescribe.

Another section of the ordinance provides that the company's motive power shall be electricity or such other power as may be approved by the council.

The franchise provides that the company must accept an ordinance authorizing it to extend its Lorain avenue line to the present city limits, on condition that the property owners' consents be presented before the passage of such ordinance. No provision is made for any other extensions except on the company's initiative, and, in fact, the ordinance expressly states that the company alone may propose extensions.

Provision is made for the forfeiture of the franchise in case the company fails to perform any of the terms and conditions required by this ordinance, or by the general ordinances of the city relating to street railroads and not inconsistent with the specific provisions of this ordinance, provided that such failure has continued for six months after the city has given the company written notice of its intention to enforce a forfeiture on account of it. The refusal of the company to comply with any material condition of the sections conferring upon the city the right to purchase the property or to designate a licensee to purchase it, will also work a forfeiture of the franchise, on condition, how-

ever, that in case the refusal affects the proposed purchase by the city, the forfeiture will lie only if the city has at the time legal authority to purchase the property.

By the acceptance of this franchise, the Cleveland Railway Company and the four low fare railway companies concerned surrendered all the prior grants and franchises held by any of them.

Such is the street railway settlement ordinance of Cleveland, which is surely one of the most complex franchise contracts ever entered into between an American city and a public service corporation. Time alone will determine how this contract will work out in practical operation. It has many excellent features, but seems to be weak in one or two important particulars. It makes no provision for extensions on the initiative of the city; it does not give the city adequate control over the company's contracts for power; it is not clear that the rates of fare could not be changed by a compliant council without being subject to a referendum vote, and it is by no means certain that the authorized capital value is not excessive. It is a safe rule that franchise values should never be capitalized, but this franchise allows a capital value that includes $3,615,823.89 for old franchise rights as determined by United States District Judge Robert W. Tayler.

CHAPTER XXVI.

STREET RAILWAY FRANCHISES THAT ARE PERPETUAL.

348. The habitat of perpetual street railway franchises in the United States.
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359. Confusion at its maximum through multifarious grants and varying conditions and regulations.
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362. Limited franchise made perpetual; exemption from paving obligations lost by transfer; unused franchises forfeited.—Rochester.
363. Franchise perpetual and exclusive; company's employees to be special policemen; paving assessments paid in instalments; double fares at night.—South Bend.
364. Competition, consolidation, litigation, and defeat for the city.—Nashville.
365. Street railways in Connecticut.

348. The habitat of perpetual street railway franchises in the United States.—Perpetual franchises are based on such a distinctive theory of the street railway business that they deserve separate treatment. They assume that the street railway is a private enterprise and that it is appropriate to grant never-ending special privileges to maintain structures in the streets to be used primarily for private profit. This theory has found expression more extensively in the eastern states than elsewhere in the country. Nevertheless, there are cities in the South, in the West and in the North which have made grants that are specifically perpetual, or at least unlimited. Substantially all of the important surface street railway franchises of Greater New York are perpetual, as

has already been shown in a preceding chapter. Perpetual franchises have been the rule in Maine, Connecticut, Pennsylvania and Delaware, and, until recently, in New Jersey. The earlier grants in Baltimore and most of the Rhode Island franchises are also perpetual. I have selected for discussion in this chapter as illustrating the terms and conditions characteristic of perpetual grants, the street railway franchises of Philadelphia, Pittsburgh, Rochester, South Bend and Nashville.

349. Competition, compensation and public control in the early franchises of Philadelphia.—While in most American cities the history of street railway franchises shows an increasing care on the part of municipal authorities to protect the public interest, in Philadelphia the reverse is true. There is no other large city in the United States that illustrates so well the caution and foresight displayed in the earliest years of street railway franchise granting, the gradual growth thereafter of the control exercised by the street railway companies over municipal politics and the final complete surrender by the city to the companies.

In 1854, the Philadelphia and Delaware River Railway Company was incorporated by the Pennsylvania legislature for the purpose of building a steam railroad from Cherry Street, Philadelphia, into the suburbs, but three years later the company's charter was amended so as to give it authority to construct a street passenger railway in Fifth and Sixth streets, and in the following year the company's name was changed to the Frankford and Southwark Street Passenger Railway Company.[1] The oldest exclusively street railway charter in Philadelphia was granted by the legislature in May, 1857, to the West Philadelphia Passenger Railway Company. While the first street railway charter, for Fifth and Sixth streets, was pending before the legislature in 1857, there was presented a remonstrance signed by 1,200 residents along the proposed line.[2] The chief objections to the introduction of street railways in Philadelphia have been summarized by Dr. Frederick W. Speirs as follows:[3]

[1] "The Street Railway Situation in Philadelphia," by Edwin O. Lewis, June 20, 1907, page 1.

[2] "The Street Railway System of Philadelphia: Its History and Present Condition," by Frederick W. Speirs, *Johns Hopkins University Studies in Historical and Political Science*, March-April-May, 1897, p. 12.

[3] *Work cited*, p. 12.

"(1) That the proposed railways were a mischievous speculation, aiming at monopoly of transportation along the great lines of travel.

"(2) That the rapidly moving cars could not be readily stopped and would thus be exceedingly dangerous to life and limb.

"(3) That the cars would disturb the repose of the streets through which they passed and make city life intolerable by the increase of noise.

"(4) That on account of the danger of the railways and of the noise, property along the lines would be heavily depreciated.

"(5) That the streets were already overcrowded, and the introduction of railways would increase the congestion of traffic.

"(6) That the rails would ruin the streets for the use of carriages and wagons."

These objections, however, did not prevent the legislature from granting the charter, and as soon as the first street railway was opened in 1858, there was a marked change in public opinion in favor of street railways. In addition to the two companies which had received legislative charters to construct street railways in Philadelphia in 1857, ten other companies were chartered in 1858 and six more in 1859.[1] Most of these early legislative grants contained a provision that no streets could be occupied or lines constructed without the consent of the city. As early as 1855 a special committee on city passenger railways had been appointed by the councils. This committee consulted Mr. Strickland Kneass, the city's chief engineer and surveyor, who in a report dated October 12, 1855, made certain notable recommendations, which Dr. Speirs quotes as follows:[2]

"As regards the policy that should govern the construction of city passenger railroads, I am inclined to the opinion that to secure the true interests of the city, as well as their proper management, they should be built and maintained by the corporation[3]—the city issuing a license for each car to companies who may have each the exclusive use of a certain route, the company to pay annually an amount that shall be an assessment upon each passenger carried, the rates to be regulated annually from sworn returns made by the officers of the company.

"The cars will then bear the same relation to the city that the omnibuses now do, and will prevent incessant clashing between companies that would otherwise be compelled to use a portion of each other's routes; it will place in the power of the city the means to correct abuses, preventing imposition upon its citizens and the creating what should be a public benefit, a nuisance. The city will then know where to look for the proper repair of its highways, and not be, in a measure, dependent upon a company of individuals whose only interest will be the amount of dividends realized.

[1] Speirs, *work cited*, p. 16.
[2] *Ibid.*, p. 85.
[3] Mr. Kneass means the *municipal* corporation.

"If it is advisable (and I agree such is the case) that a commencement be made at once, such contracts should be entered into with capitalists who seek the investment, as will enable the city to obtain the possession of the roads as soon as the financial condition of its treasury will permit, or whatever arrangement to reach that point Councils may decide upon."

Two years later when the street railway companies began to apply to the councils for local franchises, a general ordinance was passed dated July 7, 1857, which bore the earmarks of Mr. Kneass's recommendations, and which remained until repealed in 1907 a most important factor in the relation between the city and the various companies.[1] Under this ordinance all passenger railroad companies within the city were made subject to the restrictions, limitations and conditions set forth. It was made the duty of the companies to conform to the surveys, regulations and gradients as then or thereafter established by law. All proposed plans, courses, styles of rails and the manner of laying them, were to be submitted to the board of surveys and regulations, whose approval was to be secured before the companies could break ground in any street. It was provided by this ordinance that the companies should pay "the entire cost and expense of maintaining, paving, repairing and repaving that may be necessary on any road, street, avenue, or alley occupied by them." As interpreted by later ordinances and by a judicial decision, this provision applied to the entire roadway, from curb to curb. Indeed, by another ordinance, of April 1, 1859, it was expressly provided that any street railway company should after receiving notice from the chief commissioner of highways "repave or repair from curb-stone to curb-stone any street over and along which the tracks or rails of said company may pass".[2] The ordinance of 1857 also provided that the companies should clear the streets of snow "when the same impedes the travel upon such highways." Failure to carry out this requirement was punishable by a fine of $20 for each city square, recoverable before any alderman of the city and payable into the city treasury upon complaint of five citizens residing in the square. There was a stipulation, however, to the effect that if the company

[1] This ordinance is reprinted almost in full in the appendix of Dr. Speirs's monograph, pages 117 to 119. The substance of the ordinance is also reproduced in Mr. Lewis's brochure of June 20, 1907, page 3.

[2] Lewis, *work cited*, page 4.

deemed it inexpedient to use its road during the continuance of the snow, it should provide "comfortable sleighs, or other suitable vehicles, for the transportation of passengers" along the route of its railway, at the usual rates, and in that case the penalty referred to could not be recovered. In case any company should refuse or neglect for the period of ten days to remove any obstruction, mend or repair its road or pave or repave the highway after having been requested to do so by the chief commissioner of highways, the councils might forbid the running of the company's cars until the city's orders were fully complied with, and the right was reserved to the city in all such cases to repair or repave the streets and recover the expense of the undertaking by judgment "upon the road, stock and effects of such company." Every company was required to employ "careful, sober and prudent agents, conductors and drivers" to take charge of the cars, and was to be liable for the violation of any law or ordinance by its employees. Cars were not to be operated at a speed greater than six miles an hour in the built-up portions of the city, and every company was required to pay an annual car license fee of $5 "for each car intended to run" on the road. Moreover, it was provided that the car number should be painted in some conspicuous place upon each car.

Most important of all the provisions of this early ordinance were those contained in sections 8 and 9, which were as follows:

"Sect. 8. The directors of any such company or companies shall immediately after the completion of any passenger railroad in the city, file, in the office of the City Solicitor, a detailed statement, under the seal of the company, and certified under oath or affirmation by the president or secretary, of the entire cost of the same; and the city of Philadelphia reserves the right at any time to purchase the same, by paying the original cost of said road or roads and cars at a fair valuation. And any such company or companies refusing to consent to such purchase shall thereby forfeit all privileges, rights and immunities they may have acquired in the use or possession of any of the highways as aforesaid. * * * *

"Sect. 9. Any passenger railroad company which is now or may hereafter be incorporated in the city of Philadelphia, shall, by their proper officer or officers, who shall sign the same, file in the office of the City Solicitor a written obligation to comply with the provisions of this ordinance; provided, that no railroad company now incorporated shall be authorized to commence work upon any of the highways of the city until this section shall be complied with; and any failure to do so for ten days shall be taken and deemed as a refusal on the part of such

company; and in case the Philadelphia and Delaware River Railroad Company should fail to comply with the provisions of this section on or before the eighth of July, proximo, the City Councils hereby express their disapproval of an act, entitled 'A Supplement to an Act to incorporate the Philadelphia and Delaware River Railroad Company,' approved June 9, 1857, which provides for the construction of a passenger railway, by a private corporation, over Fifth and Sixth Streets, in the city of Philadelphia."

During the period from 1857 to 1874, the Pennsylvania legislature chartered altogether thirty-nine separate railway companies to operate street railways in Philadelphia.[1] In the preambles of some of these special acts, it was recited that "the interests of the public demand that no corporation should have the monopoly of carrying passengers over the streets of a city between points which require the advantages of competition." In 1874, however, the people of Pennsylvania incorporated in their new state constitution a section to the effect that "no street passenger railway shall be constructed within the limits of any city, borough or township without the consent of its local authorities."[2] The people also put in the constitution a provision prohibiting the legislature from granting corporate powers by special act. In the meantime the thirty-nine Philadelphia companies had been governed by their special charters and by the general ordinances of the city. The companies recognized the benefits of monopoly through co-operation from the outset. On May 24, 1859, there was organized a board of presidents of city passenger railway companies which remained active until 1895, when all of the city's street railways were formally combined under the control of the Union Traction Company.[3] This board of presidents passed upon questions of rates and transfers. The companies' original franchises, both legislative and local, failed to fix the rates of fare. The five cent cash fare was in vogue at the beginning, but was afterwards raised to six cents and then to seven cents. The original car license fee fixed by the general ordinance of 1857, was $5 for each car "intended to run." The tax was increased in 1859, however, to $30 per car and in 1867 to $50.[4] Later, an additional tax of $50 was imposed on each car operated on a line crossing a bridge owned by the city.

[1] Speirs, *work cited*, p. 28.
[2] Constitution, article xvii., section 9.
[3] Speirs, *work cited*, p. 28.
[4] *Ibid.*, p. 68.

Car license fees, which amounted to $10,173 in 1860, increased to $117,121, for the year ending June 30, 1906. Several of the original companies were required under their state charters to pay into the city treasury a six per cent tax on dividends. In some cases, the percentage was to be paid on the entire dividends where they exceeded six per cent on capital stock, and in other cases the tax was to be paid only on the excess dividend over six per cent.[1] The companies tried to dodge this tax, first, by claiming that authorized capital stock, rather than paid-in stock, should be the basis of reckoning the dividends, and, after this contention had been defeated in the courts, by claiming that the tax could not be collected except on dividends amounting to more than six per cent declared at any one time. The courts, however, ruled that the percentage was payable in case the aggregate dividends in any one year amounted to more than six per cent. Most of the early street railways of Philadelphia were extremely profitable and although the dividend tax applied only to the earlier companies and, indeed, not to quite all of them, the tax amounted to $115,578.71 for the year ending June 30, 1906.[2]

The regular operation of cars on Sunday was not permitted in Philadelphia until 1867. Even then the right to operate the cars on Sunday could not be secured from the legislature, but was claimed by the companies as a result of the failure of the opponents of Sunday travel to secure a permanent injunction against the Sunday cars under the old law prohibiting all persons from engaging in "any worldly employment or business whatsoever on the Lord's Day, commonly called Sunday (works of necessity and charity only excepted)." In the argument for the injunction it was claimed that some of the complainants "have actually been compelled to abandon the use of their front rooms on Sunday and to retire to other parts of their dwellings, in order that they might engage in such devotional exercises as they had been accustomed to, with their families." One clergyman testified that it was necessary for him "to make an unusual effort to keep up the train of thought" and to make his voice audible in competition with the outside noises of the cars. On the other hand, the company against which the injunction had been sought

[1] Speirs, *work cited*, p. 65.

[2] Lewis, *work cited*, p. 14.

claimed that the operation of cars on Sunday was a work of both necessity and charity, and intended to promote the cause of religion as well as the health of the city by helping the people to go to church and to breathe the fresh air.[1] Originally, negroes were not permitted to ride on the Philadelphia cars, except standing on the front platform. After long agitation, however, a legislative act was passed in 1867 giving them equal rights with the whites.

350. Organization of traction companies and change of motive power in Philadelphia.—In 1876 the state legislature passed an act to the effect that passenger railways in cities of the first class might use other than animal power to carry passengers, when authorized so to do by the councils of any such city. The limitations contained in the companies' charters restricting them to the use of horse-power were repealed, but it was stipulated that the councils should not exercise any of the powers conferred by this act unless the railway company concerned should reduce its fares to five cents for a single ride on its road.[2]

The era of combination by means of holding companies started in 1883, when the Philadelphia Traction Company was incorporated by Mr. P. A. B. Widener and Mr. W. L. Elkins, for the purpose of acquiring control of various separate companies.[3] Through this company's influence, an act was passed by the Pennsylvania legislature in 1887 providing especially for the incorporation of motor power companies and giving them authority "to enter upon any street, upon which a passenger railway now is, or may hereafter be constructed, with the consent of such passenger railway company, and may construct, maintain and operate thereon such motors, cables, electrical or other appliances, and the necessary and convenient apparatus and mechanical fixtures as will provide for the traction of the cars of such passenger railway; and to enter into contracts with passenger railway companies to construct and operate motors, cables or other appliances necessary for the traction of their cars."[4] These companies, moreover, were authorized to lease the property and franchises of the passenger railway companies which they desired to operate. It was stipulated, however, that no

[1] Speirs, *work cited*, page 22.
[2] Pennsylvania Laws, 1876, p. 147.
[3] Speirs, *work cited*, page 31.
[4] Pennsylvania Laws, 1887, p. 8.

company incorporated under this act should have the right to enter upon any street for the construction of its motors, cables and other appliances, without first obtaining the consent of the local authorities.

In 1893, when electric traction was about to be substituted for horse-power in Philadelphia, two new traction companies were formed, and by June 30, 1895, all but one of the original street railway companies of Philadelphia had been consolidated into three traction systems by means of stock purchases and leases.[1] In the meantime, when the companies applied to the councils for consent to change their motive power from horses to the overhead trolley system, practically all the companies had been compelled to accept ordinances defining more specifically their obligations to the city and establishing more firmly than ever the principle of municipal control.[2] The principal requirements of the new ordinances were set forth in section three and section four, as follows:

"Section 3. Before any permits shall be issued by the departments of the city of Philadelphia to proceed with the work of constructing the railway and trolley system authorized by this ordinance, the said railway company shall enter into an agreement or contract with the Mayor of the city (who is hereby authorized to execute the same on behalf of the city), which agreement or contract shall be in form approved by the City Solicitor, and shall among other things provide: That the said railway company shall agree to keep and maintain in good order at all times, whether paved, macadamized or unimproved, all streets, avenues or roads traversed by its lines of railways, or by its trolley system; that the said railway company shall agree to accept as binding upon it the terms and conditions of all laws and ordinances now in force, or which may hereafter be passed, relating to the government, control or regulation of railways or railroads of any kind within the city of Philadelphia. That in the construction and equipment of its roadbed, cars and its trolley system, all kinds and character of materials, supplies or workmanship, plans, profiles, elevations, designs, etc., shall be subject in every way at all times to the approval and inspection of the Departments of Public Works and Public Safety. That the said company shall take down and remove the overhead trolley system whenever directed to do so by ordinance of Councils; that the said railway company shall run cars over their entire line at intervals not exceeding five minutes between the hours of 6 and 9 A. M. and 5 and 8 P. M., and at intervals not exceeding ten minutes at all other hours of the day, excepting between the hours of 12 midnight and 5 A. M., when they shall run at least every hour. The rate of fare to be charged for a single continuous ride over the entire line shall not exceed five cents;

[1] Speirs, *work cited*, p. 34.
[2] *Ibid.*, pages 81, 120-2; Lewis, *work cited*, pages 6-8.

that the railway or trolley system herein authorized shall be so built and erected as not to interfere with the building or erecting and operating of an elevated railway or railroad on any of the streets or avenues herein named; that work upon the said railway or trolley system shall be begun within ten months, completed and in operation over the entire route herein named within three years, and that said railway company shall furnish and execute a bond in the form approved by the City Solicitor, and with security approved by the Mayor, in the sum of twenty-five thousand (25,000) dollars, conditioned upon the faithful execution and carrying out of all the terms and conditions of this ordinance and the agreement or contract herein authorized, which bond is forfeited to the city, and the money shall be paid into the city treasury if the said railway company shall default in its agreement.

"Section 4. That the said company shall, under the supervision of the Department of Public Works, repave in good, substantial and workmanlike manner, with Belgian blocks, or other improved pavement, as directed by ordinance of Councils or by the Director of the Department of Public Works, and to be done in a manner to be prescribed by and to the satisfaction of the said Department, all streets to be occupied by it not already paved with such improved pavement, and also all other streets heretofore repaved with an improved pavement, the repaving of which is not satisfactory to the said department, said repaving to be done from curb to curb for such length of street as shall be occupied by poles and trolley wires, or by other electric motive power system. Such repaving shall be commenced upon each of the said streets as soon as the construction of the roadbed or of the poles or trolley wires, or other electric motive power system shall be commenced thereon, and shall be pushed and completed with all reasonable and proper diligence as rapidly as such system is being constructed in said streets, or as Councils may by ordinance otherwise direct; if not thus pushed, the Director of the Department of Public Works may enter upon the streets and complete the same at the expense and cost of the said railway, trolley or other electric motive power company constructed therein; and that said company shall at all times hereafter keep the said paving in good repair when directed to do so by the Department of Public Works, so long as the said trolley or other electric motive power system shall be maintained on such streets: *Provided*, that such repaving or repairing aforesaid shall not free the said company from any other paving, repaving and repairing the streets occupied by it that may be required by any ordinance of Councils that has been passed, or from any other duty or obligation resting upon it regarding paving and repairing that is incumbent upon it under and in virtue of any act of Assembly; and that fifty dollars shall be paid into the city treasury by said company for the printing of this ordinance."

Under the terms of these ordinances there were filed with the city solicitor in 1893 and 1894 not fewer than twenty-seven agreements and bonds by the different companies which accepted the ordinances. Moreover, in all of the later ordinances authorizing the various companies to extend their lines, a stipulation was inserted to the effect that the extension grants were to be subject to the conditions of the ordinances

of 1893 and 1894 just described.[1] Under the comprehensive and exact terms of these ordinances, the companies which had during the preceding thirty-five years to a great extent either evaded, neglected or denied their paving obligations, commenced to spend large sums of money in repaving streets. In 1892 the companies laid 10.25 miles of asphalt and Belgian block; in 1893, they laid 50.39 miles, at an estimated cost of over $2,000,000; in 1894 they laid 131.17 miles of improved pavement, at a cost of about $5,000,000. By the close of 1896, according to the estimate of the chief of the bureau of highways, 271 miles of streets had been repaved by the companies subsequent to 1891, at a cost of about $9,000,000.[2] Philadelphia had been transformed from an ill-paved city, in which cobblestones were the almost universal paving material, to one of the best-paved cities in the United States.

In 1895, preparatory to a final merger of the three traction systems and the one or two independent street railway lines of the city, an act was passed by the legislature authorizing traction, motor power or street passenger railway companies owning, controlling or operating different lines of street railways to operate them as a general system and to lay out new car routes or circuits for the accommodation of public travel.[3] By another act passed at the same time, street railway companies in cities were authorized to sell or lease their property or franchises to traction or motor power companies or to contract with traction or motor power companies for the reconstruction or operation of their lines.[4]

In September, 1895, the Union Traction Company was chartered, with an authorized capital of $30,000,000, and the stock of the Electric Traction Company and the People's Traction Company was purchased, and the system of the Philadelphia Traction Company was leased by the new corporation.[5] In the following year, 1896, the Electric Traction and People's Traction systems were also leased and in 1898 and 1899 the two remaining street railway lines were acquired by lease.[6]

351. Securities manufactured on the basis of Philadelphia franchise values make more franchises necessary.—The story

[1] Lewis, *work cited*, page 8.
[2] Speirs, *work cited*, pages 62–3.
[3] Pennsylvania laws, 1895, p. 65.
[4] *Ibid.*, p. 68.
[5] Speirs, *work cited*, p. 35.
[6] Lewis, *work cited*, page 9.

of the financial aspects of the consolidation and reconsolidation of Philadelphia's street railways, and of the manufacture of millions of dollars' worth of salable securities out of franchise rights, is particularly startling because of its extraordinary success in Philadelphia, and because of its far-reaching effect upon the future prospects of the city. The principal street railway lines of the underlying companies of the Philadelphia Traction system are still being operated under leases which guarantee rentals of from 16% to 72% per annum on paid-in capital stock. The rentals on the three principal lines in the Electric Traction system range from 30% to 72% on paid-in capital stock and the two principal lines of the People's Traction system are drawing rentals of 24% and 40% respectively.[1] Dr. Speirs, writing in January, 1897, stated that the value of the stocks of all the street railway companies of Philadelphia was in excess of $120,000,000, while the amount of the paid-in capital stock, including that of the traction companies, was about $50,000,000, and the total cost of construction and equipment of the various roads was about $36,000,000.

"An analysis of the obligations assumed by the Union Traction Company through its purchase of the stock of the People's Traction Company," says he,[2] "throws some light upon the process of inflation of values in street railway stocks. Fifteen years ago the People's Passenger Railway Company built up an extensive system of railways by the lease of the Germantown Company at 26 per cent. annual rental on paid-in capital, and a lease of the Green and Coates Sts. Company at an annual rental of 40 per cent. on paid-in capital. Burdened by these enormous lease charges, the stock of the People's Passenger Railway Company, with $11.30 per share paid in, was sold in 1893 to the People's Traction Company at $75 per share. Now the People's Traction Company has sold its stock in turn to the Union Traction Company for $76 per share, $30 having been paid per share. In other words, the Union Traction Company has paid $76 per share for stock which represents an actual investment of $30, in order to obtain from the People's Traction Company the privilege of operating the People's Passenger Railway Company under the condition of 4 per cent. interest on $75 for every $11.30 which was actually invested in the railway, and in addition paying dividends of 40 per cent. and 26 per cent. respectively on the investment in two leased roads. By these transactions the Union Traction has undertaken to pay interest on a capitalization of about $21,000,000 for the right to operate a railway system which has cost for construction and equipment $6,830,425."

In 1897 the 447 miles of track of the Union Traction Company of Philadelphia were capitalized at $242,280 per mile.

[1] Speirs, *work cited*, p. 42. *See* also Lewis, *work cited* p. 13. [2] Page 42.

Dr. Speirs estimated that of the $5,463,000 represented by the company as its annual expenditure for fixed charges, only $1,707,800 was needed to pay interest at five per cent on the capital already invested, while the $3,755,000 remainder represented the guaranteed annual payment for the right to use the locations in the streets granted by the city to the original companies. This payment, capitalized at five per cent, amounted to $75,100,000, which represented according to Dr. Speirs' judgment, approximately the value of the street railway franchises of Philadelphia at that time. He estimated that the city and the state were receiving, all told, about $1,163,000 a year in return for these franchises, made up of $450,000 spent by the companies on paving, $92,000 paid as a dividend tax and $97,000 paid as a car license tax to the city, and $524,000 paid to the state as a tax on capital stock and on gross receipts. Under the Pennsylvania laws all corporations were required to pay into the state treasury a tax of one-half of one per cent on the actual value of their capital stock and all transportation companies were required to pay to the state also eight-tenths of one per cent of their gross receipts.

After the Union Traction Company had been in existence for seven years, the Philadelphia Rapid Transit Company was organized, and the entire traction system was leased to it July 1, 1902, for a period of 999 years, at a rental of three per cent on the par value of its $30,000,000 of stock for the first two years; four per cent for the next two years; five per cent for the third two years and six per cent for the 993 years commencing July 1, 1908. It should be noted, moreover, that only $10,500,000 had been paid in on the Union Traction Company's stock so that the guaranteed rental commencing with 1908 was 17.1 per cent upon the actual paid-in capital of the company. Moreover, the Philadelphia Rapid Transit Company assumed all of the obligations of the Union Traction Company and its subsidiary traction companies under the requirements of the leases of the underlying roads. It is hardly to be wondered at that for the year ending June 30, 1907, the company had an actual deficit of $364,000, although its operating expenses were only $10,095,098 as against gross receipts of $18,340,690. The Company's fixed charges, made up of rentals, interest on

bonds, car license fees and taxes amounted during the year to $8,609.641.[1] It should be noted, also, that beginning with the succeeding fiscal year, the company would be required to pay an additional one per cent rental on the $30,000,000 stock of the Union Traction Company. It was at this interesting stage of the financial game that the city of Philadelphia was asked to make good the company's ventures in the manufacture of securities by the readjustment of its franchise rights.

352. Mayor Weaver's opinion of the new franchise proposition.—At the close of Mr. John Weaver's administration, the Philadelphia Rapid Transit Company found itself operating on a deficit, with no dividends paid. The process of piling securities on securities and forcing value into them by means of extravagant leases had apparently been carried as far as it could be under the street railway charters and ordinances described in the preceding sections. In order to keep the rapid transit company afloat and to give its securities value, it was necessary that something should be done by the city. The company complained that it was unable to raise the funds to provide the additional transit facilities demanded by the public. In his message to the councils, dated April 1, 1907, Mayor Weaver said:[2]

"The community was startled a few weeks ago by a plan called 'The Retail Merchants' Plan,' which was supposed to be a plan to relieve the Transit situation, yet, strange to say, an examination of it revealed the fact that it did not touch this situation, but was merely a plan to relieve the Rapid Transit Company of certain duties and obligations, and to relieve the underlying companies of certain legislation to which their franchises were liable. It may be well to sound a note of warning here because I am informed that this plan may in the near future be before your Honorable Bodies for rejection. While it is called 'The Retail Merchants' Plan,' I think you may safely call it 'The Rapid Transit Company's Plan,' because a number of its salient features had been discussed with me twelve months ago by one of the Directors of the Traction Company, and surely a plan that has no benefit except alone to the Rapid Transit Company and its underlying companies, whose roads it leases, must be a Rapid Transit Company Plan.

"Look, for a moment, of what it consists! First, foremost and above all it provides for the repeal at once of an ordinance of 1857, which gives the City some hold on street railway companies. They are fear-

[1] "Sixth Annual Report of the Philadelphia Rapid Transit Company, for the year ending June 30, 1908," showing comparisons with preceding year, published in the *Philadelphia Record*, September 16, 1909.

[2] "Fourth Annual Message of John Weaver, Mayor of the City of Philadelphia," April 1, 1907, pp. liii-lv.

ful that the City will exercise its rights under this ordinance, and although the Company and its franchise, and therefore its capital stock, has always been subject to this ordinance they fear that it may interfere with the value of the stock of the Company, hence it must be repealed. There is absolutely no reason for its repeal and every reason why it should not be repealed. It is the one hold the City has on these companies with which to compel them to do what other ordinances require them to do; it is the one ordinance that will enable the City to take back its franchises, otherwise they are everlasting and without end. * * * *

"Then the Rapid Transit Plan provides that the franchises of all the underlying companies shall become perpetual. It has been a popular fallacy fostered perhaps by the transit interests that the franchises that these underlying companies held were perpetual. They never have been perpetual. The ordinance and laws show that they are 'revocable at any time at the will of the people through their representatives in Councils.' Every company obtaining a franchise has known this always, and every director of every company has known it or ought to have known it, and every stockholder of every company has known it or ought to have known it, and now in the very middle of our agitation for a limited franchise the Rapid Transit Company comes with a proposition that we shall make the franchises of every underlying company perpetual. This is a flying in the face of all modern thought on the subject of franchises. They never should be perpetual. The people of Philadelphia have a right to take back these franchises, and I beg of you, under no circumstances, to take this right away from them."

353. Philadelphia's new street railway contract of July 1, 1907—Concessions to the city.—The plan to which Mayor Weaver made such vigorous objection was soon afterwards formally submitted to the councils, embodied by them in an ordinance, passed and made binding upon both parties by a contract dated July 1, 1907, approved and executed on behalf of the city by Mayor Reyburn. By this ordinance it was specifically provided that the ordinance to regulate passenger railways approved July 7, 1857, "together with all supplements thereto, and all other ordinances and parts of ordinances, and all contracts, inconsistent herewith, are hereby repealed, canceled and annulled." By this ordinance also, the mayor was authorized and directed to execute the contract the terms of which were set forth in full as a part of the ordinance. This contract recited that beginning about the year 1857, different companies to the number of upwards of fifty, incorporated by the state of Pennsylvania, had received the consent of the city to occupy various streets for the purpose of transporting passengers and that these local franchises and consents had been granted subject to various re-

strictions and conditions. The contract also recited that the various companies subsequently to their securing franchises had been leased for long terms of years by traction or motor power companies which installed the electric system of propelling cars, and that all these leases by assignments and various conveyances became vested in the Philadelphia Rapid Transit Company, which thus controlled and operated as one general system practically all the street passenger railways of the city. The contract further recited that the terms, conditions, restrictions and liabilities imposed upon the various subsidiary companies differed widely and were subject to dispute and uncertainty with respect to many of their provisions. It was declared that the city should have a voice in the management of the company and a supervision of its accounts and expenditures. It was further recited that "a large sum of money is required to improve, complete and extend the present system of the Company in order that it shall better serve the public; and for this purpose it is essential that the position of the Company be clearly defined, and the securities of itself and its underlying properties unquestioned, and its right to make extensions in the future assured, in order that it may obtain credit to finance the increased transit facilities so necessary for the welfare of the public and the development of the City." After still further recitals of the beneficent purposes to be accomplished by the new arrangement, the contract proceeded to the substance of the matter. Putting its best foot forward, it stipulated, first, that within thirty days the company should call upon its stockholders for the portion of its capital stock unpaid, to be paid in installments of $5 each, the last of which was to be payable not later than December 31, 1908. This would make available $12,000,000 in cash to be expended for the completion of improvements already undertaken, for providing new lines, power and equipment and for the general improvement of the transit system. The contract stipulated that no further increase of capital stock or funded debt should be made by the company or any of its subsidiaries at any time or for any purpose, without the city's consent. It also stipulated that no further leases, obligations or guaranties should be assumed by the company and that none of the stocks, leaseholds or franchises held by the company should be disposed of

during the continuance of this agreement, without like consent. In case the company should desire to extend any of its lines or make any additions to its power or equipment, or any betterments of its system, the expenditures for which required additional capital, the company was to present a communication to councils setting forth the necessity for such extensions, additions or betterments with their estimated cost and a plan for raising the capital required. It was provided that no such plan should be effective and no such stocks or bonds be issued by the company, and that no guaranties or liabilities for the purpose of carrying out the plan should be incurred until the plan had been approved by the city. If, on the other hand, it was the councils that desired, either on their own initiative or on the petition of citizens, to have new lines of street railways constructed, there was a stipulation that the route of any such line and the terms and conditions under which it was to be built, financed and operated, should be embodied in an ordinance. The company was to be given ninety days after the passage of any such ordinance within which to accept it. If the company rejected or failed to accept the plan within that period, or after accepting it, failed to enter upon the work in good faith and prosecute it according to the ordinance, then the city might offer the construction and operation of such new road under the same terms and conditions to any other person or company willing to undertake the work. It was provided, furthermore, that in the case of new lines constructed by the rapid transit company, the necessary capital was to be raised, as far as practicable, by means of bonds issued in denominations of $100, $500 and $1,000, guaranteed by the company as to principal and interest, and offered to public subscription. In no case, however, were the bonds to be sold for less than par. Furthermore, to such extent as it might prove impracticable to finance new enterprises with bonds, or in case additional capital should be needed for extensions, additions or betterments to existing lines, power or equipment, the money might be raised by an increase in the company's capital stock, but only with the city's express consent. All such increases of stock were to be full paid at par in cash.

The mayor, by virtue of his office, and two citizens of the city chosen from time to time by the councils to serve for

four years, were to sit as the city's representatives on the company's board of directors, with full power to vote upon questions that might come before the board the same as if they had been elected by the stockholders, but without incurring any liability as directors. It should be noted that in addition to the three city directors, the company has seven directors elected by the stockholders.

The company was required to file an annual statement of receipts and expenditures with the city controller and it was made the duty of that official to examine the company's books, accounts and vouchers for the purpose of ascertaining the correctness of this report. The company was forbidden to declare or pay any dividend to its stockholders beyond six per cent per annum, cumulative from January 1, 1907, on the actual amounts of capital stock paid into the company's treasury in cash, without at the same time appropriating from earnings and surplus and paying to the city a sum equal to the portion of the total dividends in excess of the six per cent return on the paid-in stock.

354. The city's rights surrendered and the company's obligations commuted.—After having made such an extensive array of concessions to the city, the contract proceeded to divest the city of all the most important powers it had retained under the original franchise grants and ordinances affecting the underlying companies. This comprehensive surrender of public control is couched in the following language:

"The City hereby confirms to the Company and its subsidiary companies all of the consents, rights and franchises heretofore granted to and exercised by them, and each of them, including the right of operation by the overhead trolley system, free of all terms, conditions and regulations not herein provided for, and does further give up and surrender and agree not to exercise any rights which it may possess in respect to a repeal or resumption of any of the said rights now possessed or heretofore granted, or a taking over of any of said properties, any law, ordinance or contract now in force, or hereafter passed to the contrary notwithstanding; *Provided, however*, That the present rates of fare may be changed from time to time, but only with the consent of both parties hereto; *And provided further*, That nothing in this contract contained shall be construed to limit the power of the City to make all rules and regulations, relating to the operation and management of the lines controlled by the Company, necessary and proper to be made under the police power."

All contracts, agreements and bonds existing between the city and the company and its subsidiary companies were ex-

pressly superseded and canceled, with the exception of an agreement on the part of the company entered into March 28, 1906, to contribute $400,000 toward the elimination of grade crossings, and two other agreements, neither of which was of general importance.

It was also provided in the agreement that in lieu of all obligations and liabilities on the part of the company and its subsidiaries for paving, repaving and repairing streets, for removing snow and for the payment of license fees for cars run on the streets and bridges of the city, and in lieu of the right of the city to impose in the future any similar obligation, the company was to pay a fixed annual sum into the city treasury beginning at $500,000 during the first ten years, and increasing by $50,000 for each succeeding ten-year period until during the fifth ten-year period, the payment was to be at the rate of $700,000 a year. The aggregate of the annual payments required under this provision would amount to $30,000,000 during the course of the fifty years succeeding the date of the contract. It was stipulated, however, that in case additional streets should be occupied by the company for its surface lines, then the company was to make additional annual payments on the basis of seven cents per square yard of macadam pavement, eight cents per square yard of asphalt and six cents per square yard of other pavement on such streets used by the company. On the other hand, if at any time the company, with the city's consent, should abandon the use of any streets, the annual payments were to be reduced in the same manner at the rates just described. It was expressly stated that this agreement was not intended to relieve the company or its subsidiaries from taxation on their real estate or on their dividends as provided in their original charters. It was further provided that against any other taxes and assessments thereafter imposed upon the company for the benefit of the city, there should be credited all sums paid under this contract in lieu of paving and car license taxes as well as all sums paid to the city through a division of net earnings. It was stipulated, however, that nothing in this contract should relieve the company of the obligation to replace or repair pavements removed or damaged by the company's construction and repair work undertaken with reference to its tracks or conduits.

355. The sinking fund and the right of Philadelphia to purchase the company's property after fifty years.—The contract also provided for the establishment of a sinking fund to be in the custody of a commission composed of the mayor, the president of the company and the president of the board of directors of city trusts.[1] Beginning with the month of July, 1912, the company was to make payments into the sinking fund at the rate of $10,000 a month for a period of ten years; then at the rate of $15,000 a month for the second period of ten years; then at the rate of $20,000 a month for the third period of ten years; then at the rate of $25,000 a month for the fourth period of ten years and finally at the rate of $30,000 a month for the balance of the term of the contract. These payments would aggregate $10,200,000 by the end of fifty years from the date of this contract, and it was estimated that by investment and reinvestment at four per cent, the sinking fund would at the end of fifty years be sufficient to wipe out the company's $30,000,000 of capital stock. It was stipulated that the payments to the sinking fund should be treated as fixed charges and that no dividends should be payable to stockholders and no surplus earnings be distributed so long as any of the sinking fund payments were in arrears. The commission having charge of the investment and re-investment of the moneys in the sinking fund was to be confined to the class of securities named by the statutes of the state as proper investments for trustees, except that the company's stock might be purchased not above par and the bonds and underlying securities might be purchased on a four per cent income basis. The commission was given authority to subscribe for the company's stock or bonds issued for the purposes of making extensions or betterments. Once a year the commission was to file with the city controller a full and accurate account of the sinking fund and the controller was to examine the books, accounts, securities and vouchers relating to the fund and report the result to councils, but the city reserved the right at any time after the fund had reached the amount of

[1] The Board of Directors of City Trusts was established in 1869, and has charge of Girard Estate, Girard College, Wills' Hospital and other trusts of the city. The board is composed of eleven directors appointed by the court of common pleas, together with the mayor and the presidents of select and common councils, by virtue of their offices.

$5,000,000 to require that the fund and all future payments to it be turned into the city treasury.

The city reserved the right upon July 1, 1957, or upon the first day of any July thereafter, to purchase all the property, leaseholds and franchises of the company "subject to all indebtedness now existing or hereafter lawfully created hereunder." In case the city desired to purchase the property, it was to give the company six months' notice of its intention to do so, and was to pay the company an amount equal to par for the capital stock then outstanding, that is to say, the $30,000,000 already authorized and as much more as had been issued with the city's consent. It was stipulated that the sinking fund, if not already paid over to the city, should be available for the purpose of paying or helping to pay for the property. It was expressly set forth that the contract should continue in force until the city should exercise its right of purchase, but after that, the city would become the owner of all the company's franchises, leaseholds, rights, property and privileges and might either operate them or lease the right to operate them on such terms and conditions as it should deem fit. The city's rights were to be assignable and could be put up at public auction to the highest bidder. The company reserved the right to be a corporation, with the power to operate street passenger railway systems, and was expressly authorized to become a bidder at any such public auction.

It was provided that nothing in this contract, and no act performed by the city under the contract, should render the city liable for any of the debts or obligations of the company unless or until the city exercised its option of purchase. It was agreed that the city's credit should not be pledged or loaned to the company and that the city should not become a joint owner or stockholder in the company.

The consent of the city, wherever required under this contract, was to be given only by ordinance of councils.

356. The Philadelphia contract characterized.—In an argument prepared for the use and information of city councils in opposition to this ordinance, Mr. Edwin O. Lewis, a member of the common council, on June 20, 1907, stated that under the old ordinances the company was under obligation to keep in repair 4,318,918 square yards of Belgian block

pavement; 1,509,829 square yards of asphalt; 499,072 square yards of macadam; 344,814 square yards of brick and 27,699 square yards of cobble. He estimated that on the basis of the six, seven and eight cent allowances per square yard for additional street surface, contained in the contract itself, the cost to the company of paving repairs in 1906 amounted to $437,207. To this he added for car licenses paid in 1906, the sum of $121,050 and for the yearly average cost of snow removal $28,036. These sums added together made a total of $586,293 of the company's expenditures for 1906 which were to be commuted for an annual payment fixed for the first ten years of the period at only $500,000. According to this reckoning, the city would lose by the contract the sum of $862,933 during the first ten-year period on account of the commutation of the paving, snow removal and car license taxes.

This prospective financial loss, which in all probability would turn out to have been greatly underestimated on account of the small allowances per yard made for keeping the pavements in permanent repair, including their renewal, was the least of the objections to this ordinance. The provisions that marked it as a base and downright betrayal of the future interests of a great city are those which confirm all the underlying perpetual franchises of the subsidiary companies, which expressly surrender the city's right reserved in the ordinance of 1857 to purchase the properties, which definitely cancel all the city's reserved rights of regulation, and finally which foist upon the community the mawking right to purchase at par the capital stock of the water-logged holding company subject to all outstanding indebtedness and subject to the obligations of underlying leases at exorbitant rentals from companies having perpetual franchises free from the possibility of forfeiture or of adequate regulation. The consummation of this municipal crime, only two years after the city of Philadelphia had risen in a religious frenzy to defeat the proposed gas lease extension, a much less infamous proposition, is the crowning proof of Philadelphia's unfitness to associate with other large American cities, profligate as most of them are.[1]

[1] For a discussion of the Philadelphia street railway contract subsequent to its going into effect, *see* "Philadelphia's Relation to Rapid Transit Company," by Edwin O. Lewis, in *The Annals* for May, 1908.

357. Street railway conditions in Pittsburgh. — In a digest of traction ordinances prepared for the Voters' League in 1909, there appear the names of ninety-six different street railway companies which had acquired rights in the streets of old Pittsburgh.[1] All the street railways of Pittsburgh are now operated by the Pittsburgh Railways Company, which is controlled through stock ownership by the Philadelphia Company. The latter also controls the principal gas and electric light companies of the city. If we may credit the report of "The Pittsburgh Survey," the transit system of Pittsburgh was in 1908 about as bad as any in the United States.[2] This report states that there are no through car lines, all cars being turned back by loops in the business district, and that no transfers are given in the business district. Citizens are required to pay all the way from five cents to twenty-five cents to ride across the city and its suburbs. Transfers are given on many lines outside of the business district, but no transfers are given anywhere after 11.30 P. M., or on holidays. The tracks are in bad condition, transit lines are congested on account of bad routing, strap-hanging is at a maximum and operation is extremely noisy and disagreeable. It is said that the Boston Elevated Railway Company, operating all the surface, elevated and subway lines of Boston and paying from six to eight per cent dividends on its capital stock, had net earnings, after taxes had been paid, of 6.54 cents per car mile, while the Pittsburgh Railways Company, according to its last published report had earnings, after paying taxes, of 12.55 cents per car mile.

Prior to 1874 all the Pittsburgh street railway companies were incorporated by special act of the Pennsylvania legislature. Since that time all new companies have been incorporated under general laws. All franchises are unlimited as to time and therefore perpetual unless forfeited, except in a few cases where the city reserved the right to purchase the company's property.

358. Provisions of Pittsburgh's early street railway charters and franchises.—The first street railway companies

[1] Digest of Traction Ordinances, loaned to the writer by Tensard De Wolfe, Secretary of the Voters' League of Pittsburgh.

[2] See "The Transit Situation in Pittsburgh," by John P. Fox published in *Charities and the Commons*, February 6, 1909.

in Pittsburgh were incorporated in 1859. In that year four companies were chartered with the right to construct railways on different routes subject to the consent of the local authorities. All these companies were required by their charters to keep the streets occupied by them in permanent repair from curb to curb. They were also required to pay an annual car license tax of $20 per car for the first five years; $30 per car for the next five years and $40 per car thereafter, except in the case of the Pittsburgh and Birmingham Passenger Railway Company, whose car license fee was to remain permanently at $30 per annum after the first five years.[1] In 1860 a fifth company was chartered and was made subject to similar obligations.[2] All of these companies were required, in addition to their car license fees, to pay a three per cent tax on their dividends or net profits during the first five years, and a tax of five per cent thereafter. The terms of the state charters were somewhat modified by the ordinances under which the companies secured the consent of the local authorities to the construction of their roads. By the Citizens' Passenger Railway ordinance, for example, it was stipulated that cars run on holidays or fair days and any extra cars, were to be exempt from the car license tax.[3] Payments required of the company were to be made under oath and the company's books were to be open to inspection. The Pittsburgh, Oakland and East Liberty Railway ordinance made still more radical changes.[4] It commuted the tax on dividends to a fixed yearly payment of $200 for the first five years, and $400 thereafter. It also required the company to keep the streets clean as well as in permanent repair from curb to curb, and reserved to the city the right at any time after twenty years, by giving the company one year's notice, to take possession of the road and stock of the company upon payment of a sum to be fixed by five disinterested appraisers to be appointed by the president judge of the court of quarter sessions. It was also expressly stipulated that this ordinance should not go into effect until the com-

[1] For Citizens Passenger Railway Company, *see* Pennsylvania Laws, 1859, p. 208; for Pittsburgh, Oakland and East Liberty Railway Company, *see* Pennsylvania Laws, 1859, p. 700; for Pittsburgh and Birmingham Passenger Railway Company, *see* Pennsylvania Laws, 1859, p. 749; for Pittsburgh, Allegheny and Manchester Railway Company, *see* Pennsylvania Laws, 1859, page 783.

[2] Monongahela Passenger Railway Company. Pennsylvania Laws, 1860, p. 877.

[3] Ordinance Book 2, page 136.

[4] *Ibid.*, p. 150.

pany had filed a written acceptance agreeing that any failure to comply with any of its provisions should work a revocation of the privileges granted. The Pittsburgh and Birmingham Passenger Railway ordinance stipulated that cars should be given vehicle license numbers, but that cars reserved for accidents should not be required to pay the license tax.[1] By this ordinance, it was also provided that the company's loans, both principal and interest, should be excluded in ascertaining the net profits upon which the percentage tax was to be paid. This ordinance contained the same provisions in regard to cleaning the streets and the purchase of the property by the city as the ordinance last described. The Pittsburgh, Allegheny and Manchester Railway ordinance provided that in lieu of the car license tax and the tax upon dividends prescribed in its state charter, the company should pay the city the fixed sum of $100 a year during the first five years and $200 a year during the next fifteen years, the amount to be paid thereafter being subject to later determination by ordinance.[2] The Monongahela Passenger Railway ordinance of 1860 stipulated that in lieu of the tax on dividends prescribed in its charter, the company was to make a fixed payment of $200 a year for the first five years and $400 a year thereafter.[3] This company was also required to clean the streets occupied by its tracks. In 1862 one of these companies was expressly authorized by the legislature to agree with the city to pay into the city treasury a fixed annual sum as a consideration for the use of the streets in lieu of the tax on dividends, and was also relieved from keeping the roadway in repair except between its rails.[4]

By an act of 1869, the councils of the city of Pittsburgh were authorized to enter into a contract with any passenger railway company within the city whereby the company would be relieved from the duty of keeping in repair and cleaning the streets through which its railway passed upon the payment of such annual sum of money as should be agreed upon between the city and the company.[5] From this time on there was great confusion in the local grants. Another company was incorporated by a special act in 1870

[1] Ordinance Book 2, p. 148.
[2] *Ibid.*, p. 159.
[3] *Ibid.*, p. 173.
[4] Pennsylvania Laws, 1862, p. 367.
[5] *Ibid*, 1869., p. 1027.

and given a local franchise on the old terms, namely, on condition that the company should keep the roadway in permanent repair from curb to curb, pay a car license fee of $20 a year during the first five years and $30 a year thereafter, and pay a tax of three per cent on its dividends during the first five years and five per cent thereafter.[1] These payments were to be divided equally between the city and the boroughs outside of the city through which the route passed. The company's Pittsburgh ordinance reserved to the city the right to repossess the road at the end of twenty years on the same terms as those already described in connection with one or two of the earlier franchises.[2]

359. Confusion at its maximum through multifarious grants and varying conditions and regulations.—The confusion into which Pittsburgh street railway franchises fell as extensions were granted from time to time to the old companies occupying the streets, multiplied, as shown by the attitude of the city toward the company's paving obligations. The Citizens' Passenger Railway Company, for example, was granted an extension of its road in 1880 with the obligation to pave, repair and clean between its tracks and for a distance of two feet on either side.[3] In 1885 the company was given another extension which required it to pave and repair between its outside rails only.[4] This company received still another extension in 1898 subject to the terms of the general ordinance of 1890, which required paving between the tracks and for a distance of one foot on either side.[5] In 1879 the Pittsburgh and West End Passenger Railway Company was required to keep the roadway between its rails, its tracks and for one foot on either side in repair, but was not required to do any repaving on streets that were then paved with wooden blocks.[6] Two years earlier, one company had been required to clean and keep in perpetual repair that portion of Liberty street occupied by it from the outside of its northern track to the curb line on the southern side of the street.[7] The same company was released in 1884 by a special ordinance from cleaning the streets through which its lines passed.[8] In 1881 the

[1] Pennsylvania Laws, 1870, p. 989.
[2] Ordinance Book 3, p. 35.
[3] Ordinance Book 4, p. 246.
[4] *Ibid.*, p. 615.
[5] Ordinance Book 11, p. 55.
[6] Ordinance Book 5, p. 210.
[7] *Ibid.*, p. 12[2].
[8] Ordinance Book 4, p. 455.

North Side Passenger Railway Company got a franchise that imposed upon it the old requirement of keeping the streets in repair from curb to curb.[1] It was also stipulated in this company's ordinance, as it had already been in a number of others, that in case of grading or regrading the street the company should take up and relay its tracks to fit the new alignment at its own expense. This company was required to pay an annual car license fee of $10 per car. In 1886 a street railway franchise was granted to a new company with the requirement that the roadway should be kept in repair to a distance of one and one-half feet outside of the company's tracks.[2]

In one of the early state charters the amount of the company's capital stock had been fixed and the company had been authorized to issue bonds not to exceed half the amount of the stock, and the rate of interest had been limited to seven per cent.[3] But nowhere in the city franchises does there appear any limitation upon the capital stock or bond issues of the various companies. From time to time, however, and in different cases, the city gave the companies the right to lease their roads, authorized the joint use of tracks, approved the abandonment of portions of routes, gave franchises on condition that the companies should be subject to future ordinances, and, in very recent years, stipulated that certain payments should be made as compensation for franchise grants. In the case of the Federal Street and Pleasant Valley Railway Company, a city ordinance of 1870 required the payment of a two per cent tax on the company's dividends or net profits and a car license fee of $20 for the first five years and $30 thereafter.[4] By a later ordinance, in 1885, this scheme of taxation was changed, and the company was required to pay into the city treasury a sum proportioned to $40 a car and five per cent of dividends declared, as the length of the company's line inside of the city limits was to the length of its entire road.[5]

360. General Pittsburgh ordinances from 1890 on.—By the terms of the general ordinance of February 25, 1890, it was stipulated that every passenger or street railway com-

[1] Ordinance Book 5, p. 266.
[2] *Ibid.*, p. 481.
[3] Pittsburgh and Birmingham Passenger Railway Company, Pennsylvania Laws 1859, p. 749.
[4] Ordinance Book 2, p. 555.
[5] Ordinance Book 4, p. 574.

pany thereafter obtaining the specific consent of the city to use or occupy the streets, should exercise such consent under the terms of this ordinance.[1] It was further expressly stipulated, however, that no company should have the right to occupy the streets under the terms of this ordinance without first getting the city's consent by a special ordinance. There was a requirement that before constructing its railway or any extension or branch or alteration of it, the company should file with the department of public works a plan showing the location of its proposed tracks, sidings, turnouts and switches, the pattern of its rails and the kind and character of foundation or roadbed to be laid. In case the company proposed to use a conduit or subway through which motive power would be supplied for the traction of cars, the plans submitted were to show the size, location and manner of construction of such conduit or subway and the width and position of the slot or opening. If the company proposed to use an overhead traction system, its plans were to show the size, character and location with respect to the roadway or curb line of the posts, poles or other supports to be placed in the streets. The plans so filed were to be subject to the approval of the chief of the department of public works or of the councils' committee on public works. All tracks were to be of standard gauge. In every case the company was to pave the space between its tracks and for one foot on either side and keep this portion of the pavement clean and in good repair as long as the tracks continued to be used. It was stipulated that companies operating street railways, when crossing each other's routes, should with respect to each other observe the law of the road except in cases where at the point of intersection the grade of either or both companies was ascending or descending, in which case the company whose car was on a descending grade should have the right of way over a car on either a lesser descending grade, on a level or on an ascending grade. Every car was to have a loud-sounding gong which was to be rung by the person operating the car when approaching all street crossings or when passing other cars. At crossings of other street railways the company was to have its cars approach slowly and under complete control, and every car

[1] Pittsburgh Digest, 1804 to 1908, p. 699.

was to be brought to a full stop within a car length of the crossing and before passing over it. At grade crossings of steam railways, the conductor of the street car, before allowing his car to proceed, was to go forward to ascertain whether it could take the crossing in safety. Street cars were to give precedence to the fire department when it was going to fires, and to police patrol wagons when they were answering calls. No street car was to pass over any hose or other apparatus of the fire department in use for the purpose of extinguishing a fire unless it passed upon a creeper, or other device approved by the chief of the department of public safety, that would fully protect the apparatus from injury. It was provided that the fire department could cut any company's wires or other overhead devices whenever they obstructed or endangered the work of the department, and in such cases the city would not be liable for damages. Companies using electricity were to keep their entire electrical system and apparatus open to inspection by the city authorities and subject to their supervision in all respects pertaining to public safety.

By a general ordinance passed in 1893 all street railway companies in Pittsburgh were required to equip their cars with the "most modern improved pilot or safety guard" subject to the approval of the chief of the department of safety.[1] By another ordinance, passed in 1895, all passenger railway companies using the streets of the city were required to place "upon the front or rear end of each car a suitable and proper cabin or inclosure for the safety and protection of the motormen, as well as the safety and protection of the public."[2]

By another ordinance the city has made it unlawful for any passenger or other railway company "to place or cause to be placed, or permit to accumulate any heap or heaps, or piles of ice, snow or dirt or other rubbish, upon any street, lane or alley in the city of Pittsburgh traversed by said railways."[3]

By an ordinance passed July 30, 1906, the city fixed a uniform annual car license fee of $100 to be paid on the

[1] Pittsburgh Digest, *already cited*, p. 705.
[2] *Ibid.*, p. 706.
[3] *Ibid.*, p. 707.

first day of April of each year.[1] Upon the payment of this fee the city treasurer was to issue to the company for each car a license plate of a design approved by him, not less than three inches by six inches in measurement, which was to be displayed in a conspicuous place in the interior of the car licensed. Sworn returns of the number of cars actually used and operated in the streets of the city were to be made by the proper officers of the companies not later than January 10 of each year. In case of neglect or refusal on the part of any company to make such return, the city controller was to estimate "to the best of his ability" the number of cars used and his estimate was to be conclusive. It was provided, however, that license fees should not be required for extra cars used as substitutes for other cars for holidays or other extra occasions. Moreover, all cars running on an average less than twelve hours a day were to pay in proportion to the number of hours' run, assuming fourteen hours to constitute a full day's use.

361. General laws of Pennsylvania regulating street railways.—In Pennsylvania as in other states the general law for the incorporation of street railway companies embodies many provisions which have a bearing on the companies' rights in the streets. Under the state constitution no street passenger railway may be constructed within the limits of any city, borough or township without the consent of the local authorities.[2] Under the general law of 1905, companies may be incorporated for the purpose of building and operating street railways for public use by any other power than locomotives upon any streets where no tracks have already been laid or authorized.[3] Such companies have power among other things to sell or lease their roads or franchises, or portions of them, to traction companies or other passenger railway companies, or to acquire other street railways by lease or purchase. A company desiring authority to construct a branch or extension is required to file in the office of the secretary of the commonwealth a copy of a resolution of the company's stockholders setting forth the route of the proposed extension. This paper must be submitted to the governor, and if in his opinion the proposed

[1] Pittsburgh Digest, *already cited*, p. 703.
[2] Constitution, Article xvii, section 9.
[3] Pittsburgh Digest, *already cited*, p. 688.

extension is within the general scope of the company's original charter and does not conflict with any rights previously granted and in existence, he must approve the application. In the event of such approval, the secretary of the commonwealth issues a certificate to the effect that the extension is authorized, subject to the consent of the proper local authorities. Any company incorporated under this act has authority to use such portion of the tracks of other companies as it may require, either to complete a circuit on its road or any of its branches or extensions, or to connect its road with its branches and extensions, or with the road of any other passenger railway company. This authority is granted on condition, however, that with the company's application for a charter or for a certificate of extension it must file the written consent of the company whose tracks it is to use.

By a law of 1889 it was provided that a company proposing to construct a street railway or any branch or extension of such a railway should in good faith commence construction within one year after obtaining the consent of the local authorities and complete its road within two years thereafter, unless it received an extension of time.[1] By the act of 1905, however, provision was made for the temporary abandonment of a franchise over the whole or a portion of the company's route on terms and conditions to be agreed upon with the local authorities. In case no such agreement and consent had been acquired, however, the failure to complete a company's road over its entire route within the time required, would be construed as a permanent abandonment of the portion not so completed, but would not affect the company's right to maintain and operate the portion already built, if such portion constituted either by itself or with the company's trackage rights over the tracks of other companies a complete circuit for its cars. In case a company does not make formal application to the local authorities for their consent within two years after the date of its incorporation, and does not within two years after securing such consent begin construction and complete its road or a portion of it within the time limited by such consent, it will be deemed to have abandoned the right to occupy the streets

[1] Pittsburgh Digest, *already cited*, p. 686.

which it has not used, and they may be occupied by any other company under proper authorization. It is provided, however, that streets whose use has been temporarily abandoned or temporarily postponed under agreement with the local authorities, shall not be open to occupation by another company.

By a law of 1895 traction companies and street passenger railway companies owning, leasing or controlling the different lines of street railways of different companies, were authorized to operate them as a general system, and from time to time to lay out new routes or circuits over such railways in such a way as best to accommodate public travel.[1] By laws of 1862 and 1872 still in force, street railway companies are given the right of way over their tracks, with the exception that owners or tenants of property along the tracks may not be deprived of the reasonable enjoyment of the street in cases where the track is so near the sidewalk as to require the temporary detention of the cars.[2] By a general law of 1907, all street railway companies were authorized to do an express business and to transport farm produce, garden truck, milk, merchandise and other light freight and property on their lines, subject to reasonable regulations to be prescribed by the local authorities.[3] By another act of the same year, street railway companies were forbidden to charge more than five cents per trip or passage for each passenger within the limits of any city of the second class for a continuous ride in any one car.[4] Any officer, director or employee of the company who violates this provision is guilty of a misdemeanor and upon conviction may be fined a sum not to exceed $500 for each offense, or be imprisoned for not to exceed one year, either or both, in the discretion of the court.

362. Limited franchise made perpetual; exemption from paving obligations lost by transfer; unused franchises forfeited — Rochester. — By an ordinance passed June 24, 1862, the city of Rochester granted a franchise for the construction and operation of a horse railway in certain streets to the Rochester City and Brighton Railroad Company.[5] This original franchise was expressly limited to the period of thirty years after the date of its acceptance, but in the re-

[1] Pittsburgh Digest, *already cited*, p. 690.
[2] *Ibid.*, pp. 706, 707. [3] *Ibid.*, p. 927. [4] *Ibid.*, p. 928.
[5] Municipal Code of the City of Rochester, Vol. 2, p. 182.

adoption of the ordinance in 1887, the limitation was left out entirely.[1] Under the original ordinance the tracks were "to be laid flush with the surface of the street or avenue, and four feet and ten inches apart between the raised edges, so as to accommodate the most common width of carriage wheels, and to be laid on suitable timbers, with suitable cross ties." By an amendment to the original ordinance passed January 12, 1869, it was stipulated that the company, as soon after the granting of the franchise as the condition of the streets would permit, should put the surface of the streets inside the rails and for one foot on either side in good and thorough repair, and thereafter keep the streets inside or between the rails in good repair "only during the term of five years." It was further stipulated that the company should not be compelled for a period of five years to pay any portion of the cost of any new improvement required in any street in which its tracks were laid. Shortly thereafter, the state legislature passed a special act giving this company perpetual exemption from paving obligations.[2] Many years later, however, a new company was incorporated which acquired the franchises and stock of this company. The new company was organized under the general railroad law which made it obligatory upon all companies to pave and repair in and about their tracks and for two feet on either side. Litigation arose over the paving obligations of the new company, which claimed exemption under the act of 1869 passed for the benefit of its predecessor. The court of appeals of the state of New York and the United States Supreme Court both passed on the question and decided that the old company's exemption from the paving obligation was personal to it, and could not be transferred by lease or merger to another company.[3]

Under the first street railway ordinance of 1862, the company was not permitted to keep any portion of the pavement or street surface "broken or disturbed for a greater time than five days," and all surplus street materials were to be

[1] Municipal Code, vol. ii., *already cited*, p. 199.
[2] Laws of New York, 1869, chap. 34.
[3] *See* City of Rochester v. Rochester Railway Company, 182 N. Y. 99; and Rochester Railway Company v. City of Rochester, 205 U. S. 236, decided March 25, 1907.

carefully removed by the company and deposited in places adjacent to the street, as directed by the city officer having charge of street repairs. The original rate of speed allowed when the cars were operated by horses or mules was seven miles an hour, and a headway of at least one car every fifteen minutes during fourteen hours of every day, beginning at 6 o'clock in the morning, was required. The council reserved the right to regulate or prohibit the running of cars on Sunday. In 1887 the fifteen minute schedule was extended so as to cover the entire period from 6 o'clock in the morning till midnight, except on a few lines where half hourly service was required. With extraordinary liberality, the city in both ordinances authorized the company to run its cars as much oftener than the prescribed schedule as it might choose, either on the whole length of its road or over a portion or portions of it. After the introduction of electricity as a motive power, the seven-mile speed limit was continued in force in the downtown district, but outside of that a speed of fifteen miles per hour was permitted. At this time also the company was required not to operate on its tracks "more than three cars attached together." Fares under the original ordinance were limited to five cents for adults and three cents for children under twelve and more than five years of age, younger children being carried free when accompanied by adults. There was also a provision in the old ordinance to the effect that children under twelve going to and from school should not be charged more than two cents, but this provision was repealed in 1869 and never reënacted. At first the company was permitted to run its cars without any other conductor than the driver, but this practice was forbidden in 1894. The ordinance of 1862 contained a provision that "whenever there shall occur a fall of snow which materially obstructs the track, and allows vehicles to pass over the same on runners, the company is authorized and required to use a sufficient number of sleighs to convey passengers over the road from day to day until the cars can be used on the tracks." This provision was dropped out of the ordinance in 1887. In removing snow or ice from its tracks, the company was required to spread it evenly over the street so as not to obstruct the passage of vehicles. The use of salt for the purpose of removing snow or ice, or for any other

purpose was expressely prohibited in the ordinance of 1862. In the ordinance of 1887, however, it was stipulated that no salt or brine should be used except at curves, switches or turntables, and there only in amount barely sufficient for the purpose of removing snow or ice from the rails. Any dirt, dust, filth, snow or ice removed from the company's tracks at any street intersection was to be removed entirely from the street under penalty of $50 for each failure to do so, and a further penalty of $50 a day during the continuance of such failure. Under the original ordinance, the company was required to have the number of each car painted in a conspicuous place on the outside of the car. In 1887, it was provided that there should be posted in each car a plainly printed copy of the rates of fare, and also a printed or painted sign containing the number of the car and the name of the route or routes on which it ran. In both these ordinances the city reserved the right to make further rules and regulations relative to the construction, repair and operation of the street railway for the protection of the interests of the city and for the safety, welfare or accommodation of the public, but no alteration of the rules was to be made that would have the effect of impairing the substantial rights of the company. Under the first ordinance, the company was required to commence construction within four months and to complete its road within three years. A majority of the directors of the company were to be at all times residents of the city of Rochester. The company was not permitted to operate any but passenger cars within the limits of the city between 6 o'clock in the morning and 8 o'clock at night, except for the purpose of conveying the baggage of passengers between the depots of the steam railroads. It was stipulated that if for the space of two consecutive months the company should neglect to run cars or sleighs over its road for the accommodation of the public, it should thereby forfeit all privileges and rights in the streets, and the city reserved the right to remove the street railway fixtures and materials from the streets at the company's expense and to grant a new franchise to any other person or company free from all charge or liability for damages on account of such removal. Before placing any car in operation upon its railroad, and annually thereafter, the company

was required to take out a license for it and pay a $5 fee to the city.

There was added to the original ordinance by an amendment in 1868 a section providing that the ordinance should apply to any new company or corporation which had been or might thereafter be organized to construct or operate a street railway in Rochester. In case any such company refused to file with the city clerk its written assent to the terms and conditions of the ordinance within five days after the service of a copy of this resolution upon the president or secretary of the company, then the city's consent to the construction, maintenance and operation of any such street railroad would be thereby withdrawn.

Various sections of the original and later street railway ordinances made provision for cumulative penalties. In 1887, however, it was stipulated that the penalties prescribed for the violation of any section of the street railway ordinance should not in the aggregate exceed the sum of $150 for any specific violation, "anything hereinbefore to the contrary notwithstanding."

In 1904 Mayor James G. Cutler called the attention of the common council to the fact that a considerable number of streets in Rochester were encumbered with franchises which had not been used. In accordance with the mayor's suggestion the council passed an ordinance, December 13, 1904, to the effect that "all franchises heretofore granted to street railway corporations to construct and maintain a railroad in streets of this city, and which have not been used, or which having been used have since been disused and abandoned for more than three years, are hereby annulled and repealed."[1] The mayor was instructed to present to the attorney-general a list of these unused franchises with the request that prompt proceedings be undertaken to complete their annulment. As a result of this action suit was brought by the attorney-general, and a court decree was obtained October 1, 1906, completely annulling the unused street railway franchises in sixty-nine streets of the city.

363. Franchise perpetual and exclusive; company's employees to be special policemen; paving assessments paid in instalments; double fares at night — South Bend. — By an

[1] Municipal Code, vol. 2, *already cited*, p. 207.

ordinance adopted January 19, 1885, the city of South Bend, Indiana, authorized the construction of a horse passenger railway on all the streets and bridges of the city.[1] The South Bend Street Railroad Company, to which this ordinance was granted, was required, however, to construct its railway by single or double track upon eight specified routes. It was provided that if the company should not have its routes fully completed, equipped and in operation by January 1, 1886, all of its rights and privileges granted by this franchise should revert to the city, except as to the routes then completed. The company was to be given a further allowance of time, however, in case of delay caused by the destruction of bridges or by the order or injunction of a court, "if such order or injunction was not instigated or procured directly or indirectly by or with the consent, suggestion or procurement of said company," and if the company used all means in its power to have the order or injunction dissolved at the earliest period possible. The council reserved the right to make reasonable regulations as to the running of all cars, with the limitation that it could not require the company to operate a car more than fifteen times a day in each direction over the entire length of each route within the city limits. The rate of fare was limited to five cents between six o'clock in the morning and eleven o'clock at night, and free transfers were to be given. After eleven at night the company was authorized to charge ten cents. One section of this ordinance provided that "all conductors or drivers employed by said company whilst so employed, are hereby made Special Police Officers of the City without salary from the City, but before such appointment shall take effect a certificate of employment shall be filed with the City Clerk by the Company and such drivers or conductors shall take the oath usually taken by Special Policemen which shall be attached to such certificate." In their capacity as special police officers, the company's employees were to have power to arrest "persons guilty of disorderly conduct or of using indecent, profane or obscene language in or about the cars or barns of said Company." When the company discharged any of its conductors or drivers who had been made special policemen, it was required to give notice of the fact to the city clerk,

[1] Revised Ordinances, City of South Bend, 1905, p. 51.

and thereupon the power of such employee as policeman would cease. A similar provision giving employees the powers of special officers was carried into the franchise of the General Power and Quick Transit Company granted May 3, 1894.[1]

The ordinance of 1885 provided that the company's right to operate railways on all the tracks of the city should be perpetual, and that the common council should not grant to any person or corporation any privilege or franchises which would impair or destroy the rights, privileges and franchises granted by this ordinance to the South Bend Street Railroad Company. If, however, the common council should deem it necessary at any time that a new line of street railway be constructed on streets not occupied by the company's tracks and at least two squares distant from any of the company's constructed lines, it might adopt a resolution directing the company to build such a new line. This could not be done, however, until after the expiration of the time prescribed in this ordinance for the construction of the routes specifically enumerated. Within thirty days after receiving notice to proceed with the construction of a new line, the company was to certify to the common council a resolution of its board of directors ordering the construction of such line, with an affidavit of the president or secretary of the company that it was the company's design in good faith to proceed immediately with the work. If the company should fail to make such declaration, the council might by resolution declare its privileges and rights of way over the proposed new line of street railway forfeited. The company's rights might also be forfeited if it certified its intention to build the extension, but failed to do so at the rate of 1000 feet during each sixty days allowed. In case of such forfeiture, the city might grant the extension to any other person or company, and it was stipulated that the grantee "to the extent necessary for the proper construction and running of said line of street railway may cross any track laid under this grant." It was provided, however, that if the city had not granted a franchise to some other person or company within six months after the date of the South Bend Street Railroad Company's forfeiture, then the exclusive rights granted by this ordinance should revert to the latter company, to be held

[1] Revised Ordinances, *already cited*, p. 68.

by it as if no forfeiture had occurred. The city was not authorized to serve notice on the company requiring the construction of additional lines of street railway oftener than once in six months.

In a later grant to the successor of the South Bend Street Railroad Company, adopted November 1, 1889, the grantee was required to improve the street surface for a width of seven feet for each main track and to keep this portion of the street, as well as the poles, wires and other street railway fixtures, in good repair and free from filth and dirt, and from all obstructions to public travel.[1] In case the company failed to make any repairs or improvements required by the common council after five days' notice, the city would have the right either to cause the repairs or improvements to be made, and collect the cost from the company, or "for good cause stated" the city might declare any part of the street railway a nuisance and dangerous to public travel, and cause it to be removed from the streets by the company. The ordinance also provided that when assessments for paving or other street improvements were levied against the company it should have the option of paying on the instalment plan the same as abutting property owners.

In the ordinance granted to the General Power and Quick Transit Company in 1894, to which reference has already been made, there was a provision to the effect that the company's track should not be "used for other purposes than to transport passengers and their ordinary baggage, such goods, wares and merchandise as the said Company may be requested to carry by citizens of and persons doing business in St. Joseph County, also such material as may be required to be used by the company in the construction, extension or repair of its tracks."[2] The company was authorized to use "T" rails, but the city reserved the right at the time of paving streets to require the substitution of some other kind of rails which it deemed best adapted to the kind of pavement proposed. It was not authorized, however, to order any change in the type of rails oftener than once in ten years. This ordinance, by a specific provision, required the company to complete its electrical circuit. Each rail was to be connected "with

[1] Revised Ordinances, *already cited*, p. 58.
[2] *Ibid.*, p. 66.

a return wire or wires sufficient in electrical capacity to equal the capacity of the overhead trolley wire." Poles used by the company were to be of "number one selected cedar thirty feet in length with not less than seven inch tops," except on one street where they were to be of iron. The council reserved the right to require the company to take up and relay any of its tracks whenever that should be necessary for the purpose of grading or otherwise improving the street, or for the purpose of constructing sewers or laying water or gas pipes in the streets. It was provided that when the company's tracks were moved for the benefit of any person or corporation other than the city, the cost of such readjustment should be borne by such person or corporation.

364. Competition, consolidation, litigation, and defeat for the city — Nashville.—By an ordinance approved January 28, 1890, the city of Nashville authorized the United Electric Railway to maintain and operate by electric power the systems of street railways of twelve different companies, to which franchises had previously been granted, but which had all come under the control of the one company.[1] The city gave its consent to the acquisition by lease, purchase, consolidation or otherwise of the tracks laid or to be laid, together with all the privileges and franchises of the several original companies. It was expressly stipulated that no provision, limitation or restriction in any of the original franchises prescribing, limiting or fixing the times when the grants were to expire, should be applicable or relate to the United Electric Railway, but that its rights and privileges and the duration and enjoyment of its franchises should be co-extensive in point of time with the life of the company. The constituent companies had been required to pave and keep in repair the portion of the street surface between their tracks and rails and for two feet on either side. This obligation was continued. It was made optional with the company, however, to do the work itself or to pay the city the cost of having it done by contract. In case the company, however, refused to do the work or to pay for it, such refusal would operate as a revocation of that part of the company's franchise covering the street on which the particular work was being done. It was set forth as one of the considerations of the passage of the ordinance authorizing the con-

[1] Laws of Nashville, 1908, p. 725.

solidation of the old companies, that there should be established a universal five cent fare, and this was made one of the conditions of the grant. The company reserved, however, the right to make reasonable regulations as to tickets and the transfer of passengers from one line to another for the purpose of protecting itself from imposition and loss. The company was required to pay for the first year a car license fee amounting to $35 for each electric motor car actually in use and $20 for each trailer or horse-car. Moreover, it was stipulated that this license tax should at no time exceed $200 a year for each electric motor car and $100 a year for each trailer or horse-car. The company was required to maintain and operate all the street railway lines then in use by the various constituent companies. Failure to do so with respect to any street railway line, either in whole or in part, without the consent of the city, would operate as a forfeiture of all the company's charter rights and rights of way over that particular line.

The futility of the attempts constantly being made by cities to prevent the consolidation of competing street railway companies is well illustrated by the fact that the franchises of some of the companies going to form the United Electric Railway system contained a clause absolutely prohibiting the company to which the franchise was granted from consolidating with any other street railway company. In the case of the Main Street and Lischy Avenue Street Railway Company, the franchise ordinance, which was passed as early as 1886, contained the following provision:[1]

"That said company shall not lease or purchase the property or stock of any other street railroad company, nor shall it consolidate with or lease its road to any other corporation, individuals or associations, nor shall it become a party to any trust, or pool, but shall run its cars and maintain its property independent of any street railroad corporation or trust now in existence or hereafter created."

The United Electric Railway became bankrupt in 1894 and its property and franchises were sold to a new company organized under the name of the Nashville Street Railway. In the course of time two or three new independent companies were chartered, and in 1900 they attempted to consolidate, but failed at that time to secure the consent of the

[1] Laws of Nashville, *already cited*, p. 782.

city. Various suits were brought, the city claiming that the franchise of 1890 to the United Electric Railway was a revocable license. The courts overruled this contention and substantially held that the Nashville Street Railway was the corporate successor of the United Electric Railway, and had acquired at the foreclosure sale practically unlimited franchises over the streets held by its predecessor. While the case was on appeal before the supreme court of Tennessee, the representatives of the city came to an agreement with the company and the settlement was carried into the decree of the court and made in reality a portion of the company's franchise. The city finally consented to the consolidation of all the companies to form the Nashville Railway. The company agreed to purchase for the city a tract of land known as the Centennial Park to be held in trust for the free use of the people for park purposes. It was provided, however, that if this particular park could not be obtained for $125,000, the company was to pay that sum to the city in cash, and the money was to be invested in the purchase of some other parcel of land situated on the line of the street railway and to be devoted to park purposes. The company also agreed to pay the city two per cent of its gross annual car receipts until such receipts amounted to $1,000,000. After that the company was to pay three per cent. This money was to be used exclusively for the maintenance and betterment of public parks owned by the city, and the gross receipts tax was to be in lieu of all special or privilege taxes imposed upon the company by the city or for its benefit, but not in lieu of ad valorem taxes. The company was to spend in construction, additions, extensions, betterments, repairs and equipments of its railway system, and on the plant of the Cumberland Electric Light and Power Company with which the Nashville Railway was later consolidated, not less than $1,000,000 within a period of three years, barring delays caused by strikes or inability to get the necessary materials.

The most striking feature of this settlement was the provision for the purchase of the street railway system by the city at any time after the expiration of twenty years.[1] In case the city desired to purchase, it was required to give twelve

[1] I have already referred to this curious purchasing clause in Volume One of this book. *See* Section 57, page 61.

months' written notice of its intention to do so. The price to be paid for the property was defined as "that sum of money which if invested at the same rate of interest that would be realized by an investment in the open market, on the date said notice is given, in bonds of the city of Nashville then having twenty years to run, would yield a yearly income equal in amount to fifty per cent of the gross receipts of said twelve months." It was provided, however, that in the event of epidemics, strikes or breakdowns reducing the receipts below what they otherwise would have been, the time covered by such special emergencies should not be counted, but should be deducted from the twelve months and an equal period of time substituted to fill out the year. This purchase clause, being interpreted, means that the city of Nashville, in order to terminate the franchises and acquire the property will have to pay for the street railway system the sum upon which the company could pay three and one-half or four per cent dividends if it could use fifty per cent of its gross earnings exclusively for paying dividends. As I have already shown in a preceding section, this franchise clause, if applied to the street railways of Springfield, Mass., for the year ending September 30, 1906, would have fixed the price of the property at about $16,500,000, while the Springfield Company's total permanent investment was only $3,860,000. Such is the price that American cities are expected to pay for the termination of unlimited franchises.

365. Street railways in Connecticut.—The franchise situation in Connecticut is peculiar for the reason that all street railway franchises are granted by special acts of the legislature. Each company's charter and its franchise are one. The situation is also peculiar from the fact that while there are twelve street railway companies in the state, more than four-fifths of the street railway mileage is owned or controlled by lease by one company which is a subsidiary of the principal steam road of the state, the New York, New Haven and Hartford Railroad Company. There is a total of 951.652 miles of single track in the street railways of Connecticut, including 753.984 miles of first main track.[1] Of this amount The Connecticut Company operates 773.113 miles of single track,

[1] Fifty-Seventh Annual Report of the Railroad Commissioners, December, 1909 p. 68.

including 589.746 miles of first main track. Indeed, the street railways controlled by the New York, New Haven and Hartford Railroad Company included the lines in New Haven, Hartford, Bridgeport, Waterbury, New Britain, Stamford, New London, Meriden, and other towns.[1]

Under the general laws of Connecticut any company chartered by the general assembly for the purpose of operating street railways "may construct and operate its railway, with one or more tracks and all necessary equipments and appurtenances, upon and along the routes, highways, and public grounds permitted by said company's charter and the amendments thereto." It is provided, however, that before the company may proceed to construct its railway or lay additional tracks, it shall make a plan showing the highways through which it proposes to lay tracks, the location of the tracks as to the grade and center line of such highways and any changes proposed to be made in the highways. This plan must be presented "to the mayor and the court of common council of each city, the selectmen of each town, or the warden and burgesses of each borough, where such warden and burgesses have charge of making and repairing the highways of such borough, within which such company proposes to operate its railway." The local authorities are required thereupon, after public notice, to proceed to a hearing of all interested persons, and thereafter they may accept and adopt the plan submitted, or may make such modifications in it as they deem proper. They must notify the company of their decision within sixty days after the plan has been presented. If they refuse or neglect to give such notification within the time specified, this will be deemed a refusal to approve and accept the plan of the company. Whenever the local authorities render any decision relating to the location of any street railway tracks in any highway, or to any change proposed to be made in the highways, or as to any other matter relating to street railways, the company affected by the decision may appeal to the state railroad commissioners within thirty days of receiving notice of the action of the local authorities. The railroad commissioners must thereupon give reasonable notice to the muni-

[1] Fifty-Seventh Annual Report of Railroad Commissioners, *already cited*, pp. 363-6.

cipal authorities of the time and place of their appearance to answer the company's petition. The commissioners may make such orders in regard to the matters affected by the company's appeal as they deem equitable. If the local authorities fail to act, the railroad commissioners will have the power to act in their place.

The right to regulate the speed of street railways is reserved to the municipalities subject to appeal to the state board as in other matters, but fifteen miles an hour is fixed in the statute as the maximum speed that may be allowed. The municipal authorities are also given control, subject to appeal, over the placing of tracks, wires and other permanent structures in the highway; over the removal or relocation of such tracks and structures, and over changes in the grade of the street railways, but except for the purpose of public improvement, no orders concerning relocation, removal or changes in grade, unless applied for by the operating company, may be made except in the case of bridges, terminals, curves in turning from one street to another, and turnouts and switches not more than 150 feet long. The "wrought part of any highway made suitable for travel" must nowhere be less than eight feet in width on each side of the tracks, where they are located in the center of the street, and not less than twelve feet in width where they are located on the side of the highway, unless permission to reduce the width of the free roadway is given by the superior court. When the grade of any street railway track is changed by the local authorities, the company must pay all the cost of readjusting its tracks and one-half of the cost of the excavating, resurfacing or other construction work within lines two feet on the outside of each outer rail of the tracks. All other expenses of changing the grade of the highway are to be paid by the local authorities. In cities the hearings required in relation to street railway matters may be held by the mayor and common council, or by a standing or special committee appointed for the purpose, or by any board connected with the municipal government, which may be designated for the purpose by the mayor and common council. The railroad commissioners, subject to the right of appeal to the superior court, have exclusive jurisdiction over the method of construction or reconstruction, in whole or in part, of every street railway in Connecticut. They

may designate the kind and quality of track to be used, the method of laying it and the kind, quality and finish of all materials, tracks, wires and other fixtures, and the method and manner of applying motive power.

By a general act of 1896, it was provided that in case any street railway company authorized by its charter or a charter amendment subsequent to January 1, 1893, to construct its railway in any highway, should not have its railway built before the close of the second regular session of the general assembly after the session at which its franchise was granted, all right of such company to lay tracks in the highways specified should thereupon cease. It was provided, however, that any company having constructed a portion of its franchise acquired prior to 1893, before the date just mentioned, should not lose its rights in any such highway if it should construct its railway within two years from the time when the municipal authorities notified it to do so. In case any street railway company should discontinue the operation of its railway in any portion of a highway, or if constructed, it should not begin to operate its track within a reasonable time thereafter, the local authorities might order the company to operate its railway within thirty days from the date named in the order on penalty of the forfeiture of the right to occupy that particular street.

Street railway companies in Connecticut are authorized to transport both persons and property, but in the transportation of property other than small packages and baggage carried by passengers, they are subject to regulations that may be prescribed by the superior court upon application of the company, or of any person interested in such transportation, or of any municipality in which the street railway is located. It is also provided that when two or more street railway companies are operating in the same city or town, the superior court may upon application by any one of the companies, whenever public convenience and necessity require, authorize the applicant company to run its cars over the tracks of any other of the companies for a distance of not more than one-half mile. In case, however, the only approach to a city, upon a particular side is by a bridge or causeway for a greater distance than one-half mile, the court may authorize any suburban railway company approaching from that side to

use the tracks of any other company over the bridge or causeway, from the place where the railways meet to some central point in the city, on such terms as the court may deem just, but no company may be authorized to use the tracks of another company unless its own track is longer than the tracks to be so used. The railroad commissioners are authorized to order any street railway company to equip its cars with brakes operated by air or otherwise, whenever such action is deemed necessary. No street railway company is authorized under the general law, without specific authority from the general assembly, to issue bonds to a greater amount "than one-half the sum which its president, treasurer, and an engineer, approved by the railroad commissioners, shall certify under oath has been actually expended upon its railroad or railway." There is a provision, however, to the effect that this act shall not affect the authority already granted by law to companies chartered before the close of the legislative session of 1895, to issue bonds to the extent of seventy-five per cent of the sums so certified.

Connecticut franchises are without time limit and are therefore regarded as perpetual.

CHAPTER XXVII.

STREET RAILWAY FRANCHISES THAT ARE INDETERMINATE.

366. Increasing prestige of the indeterminate franchise.
367. Terms of the earliest Congressional street railway grant.
368. Annual reports to Congress and 25 tickets for $1 required in franchise of 1864.
369. The model street railway franchise of Washington.
370. Advantages of the indeterminate franchise in Washington illustrated.
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372. Consolidation of Boston street railways under special legislation.
373. Workingmen's tickets; gross receipts tax; conditional monopoly; franchise made irrevocable by local grant.—New Bedford.
374. Street railway locations in Massachusetts.
375. General powers and obligations of Massachusetts street railway companies.
376. Taxation of street railway companies in Massachusetts.

366. Increasing prestige of the indeterminate franchise.—Since 1898 when the Massachusetts special committee, of which Charles Francis Adams was chairman, called attention in its report to the advantages of the indeterminate franchise, there has been a great development of public interest in this form of grant, especially for street railway companies. In its primitive form, the indeterminate franchise is found in Massachusetts and the District of Columbia. In these jurisdictions, street railway grants may be revoked at any time without compensation to the companies having property in the streets. This form of franchise was described by Mr. Adams's committee as extremely illogical in theory, but the practical results of its application in Massachusetts were such as to command the committee's praise. Shortly after the publication of the Massachusetts committee's report, the indeterminate franchise found an able advocate in Mr. George C. Sikes, a well-known municipal expert whose ideas have had great practical influence, especially in Chicago. Still later, the advocacy of the indeterminate franchise has been taken up actively by Dr. Milo R. Maltbie, now a member of the public service commission for the first district in

New York, and largely as a result of his efforts, the indeterminate franchise has been made a feature of the New York rapid transit law. The indeterminate franchise has also been recognized in the Wisconsin public utilities act passed in 1907, and in the new constitution of Michigan adopted in 1908. Congress, following its policy already well-established in the District of Columbia, incorporated the indeterminate franchise in its legislation for Porto Rico and the Philippine Islands. The new street railway franchises of Chicago and Cleveland, which have already been described in a preceding chapter, also recognize the fundamental idea of the indeterminate grant, which has been characterized as "tenure during good behavior." Unquestionably, with the recognition of the unspeakable wrong that is inherent in the grant of perpetual franchises and the great practical disadvantages that usually arise in connection with limited-term grants, public sentiment is rapidly crystallizing in favor of the indeterminate franchise as the most promising present basis for public control of the street railways. It is fair to say, however, that in Massachusetts, where the indeterminate franchise is regarded by many as substantially a perpetual franchise, there is considerable sentiment for limited-term grants. Mayor James Logan, of Worcester, is one of those who disapprove of the indeterminate franchise.

"The *policy* of the State of Massachusetts is not to limit franchises," says he.[1] "It is not the *law*, but the *policy* of the state as laid down by the Railroad Commission. In 1907 there was an amendment made to the law whereby franchises could be revoked, *subject to the Railroad Commission*, but that does not meet with the approval of the writer. I want the franchise to state its limit, for the mind of man cannot now conceive what the conditions may be ten to twenty years from now, and I want the franchise to end so that the city can grant a new one and put into it the conditions which time and experience develop."

The fact that a public official so intelligent and so highly reputed as Mayor Logan should express his discontent with conditions that prevail under the Massachusetts form of indeterminate franchise, calls attention to the importance of the particular form which the indeterminate franchise may take in any particular state or city. It is undoubtedly illogical, as the Massachusetts committee of 1897 stated, that a street railway franchise should be treated as a mere revocable

[1] Letter to the author dated June 20, 1910.

permit, if by its revocation, at the whim of the governmental authorities temporarily in power, a great body of invested capital will be destroyed and a necessary public service interrupted. Whatever actual security the investor and the public may enjoy under such precarious conditions, must result from a continuous spirit of moderation among governmental officials and a complaisant attitude toward private operation of public utilities which may perhaps be characteristic of the people of Massachusetts and the United States Congress, but which could hardly be expected in some of the communities and legislative bodies of the United States. It is important, therefore, to take notice of the modifications of the Massachusetts plan as incorporated in the Chicago and Cleveland franchises, the New York rapid transit law and the Wisconsin public utilities act. In these franchises and laws the principle of the indeterminate grant is coupled with the requirement that when a franchise is revoked, the city shall purchase the property which has been invested under the franchise. In other words, the indeterminate franchise in its later forms provides not only for continuous control by the city over its streets and its transit problems, but also for the guaranty of the capital which is invested in good faith in the rendering of a continuous public service.

367. Terms of the earliest Congressional street railway grant, 1862.—In the District of Columbia Congress is the franchise granting authority, and has adopted the policy of reserving in every street railway grant the right at any time to amend, alter or repeal the act. Having complete authority over the companies, both as to their charter rights and as to their franchise privileges, Congress assumes the right to order extensions, the relocation of tracks, or a change of motive power, whenever the public interests demand such action. There has been a considerable evolution in the franchise policy of Congress since the time of the earliest street railway grants.

By an act approved May 17, 1862, the Washington and Georgetown Railroad Company was incorporated, with power to construct a street railway on Pennsylvania Avenue and other principal streets of the city of Washington.[1] Under

[1] "Laws Relating to Street Railway Franchises in the District of Columbia," 1905, p. 59.

this act the company's roads were to be deemed real estate and be liable to taxation like other real estate and personal property, except as otherwise provided in the act. The railways were to be laid in the center of the streets and avenues, and were not to interfere with or pass over the water or gas pipes. The pattern of rails was to be determined by the Secretary of the Interior and the space between the two tracks was not to be less than four feet or more than six feet and the "carriages" were not to be less than six feet in width. The company was to keep its tracks and the surface of the roadway for the space of two feet on either side of the tracks paved and in good repair at its own expense. The government reserved the right to alter the grades, or otherwise improve the streets occupied by the company's tracks, and in case of any such alteration the company was to change its railroad to conform with the altered grade and pavements. It was expressly provided that nothing in this act should be construed to authorize this company "to issue any note, token, device, scrip, or other evidence of debt to be used as a currency." The company was to place first-class cars on its railways "with all the modern improvements for the convenience and comfort of passengers," and it was to run its cars during the day every five minutes, except on two streets, where they were to run every fifteen minutes. Moreover, the cars were to be run "until twelve o'clock at night as often as every half hour; and throughout day and night as much oftener as public convenience may require." The company was to procure such passenger rooms, ticket offices, stables and depots as might be required by the business of the railroad and the convenience of the public. For the exclusive purpose of connecting its stables and depots with its main tracks, the company was authorized to lay rails through transverse or other streets as far as necessary. All articles of value inadvertently left in any of the company's cars were to be taken to the company's principal depot, and entered in a book of unclaimed goods to be open to the inspection of the public at all reasonable hours of business. Upon the demand of the President, the Secretary of War or the Secretary of the Navy, the company was to transport over its railway freight cars laden with freight for the use of the United States, a reasonable compensation being paid for the service. The mayor, the common council and the other

officials of the cities of Georgetown and Washington were expressly prohibited from doing anything to delay, hinder or obstruct the construction of the railroad. The company was given the free and uninterrupted use of its roadway, and if any person wilfully or unnecessarily impeded the passage of the company's cars or injured its depot, stations, or any of its property, the culprit was to forfeit for every such offense the sum of $5 to the company and, in addition to this penalty, be liable for any loss or damage occasioned by his act. But no suit or action could be brought against an individual under this clause unless commenced within sixty days after the date of the offense. The company was given sixty working days within which to complete its railway between the capitol and Georgetown; sixty days more within which to complete the line from the capitol to the Navy Yard, and six months for its other routes. In case the company failed to comply with these time requirements, the act was to be null and void and no rights to be acquired under it.

368. Annual reports to Congress and 25 tickets for $1 required in franchise of 1864.—By an act of Congress passed July 1, 1864, the Metropolitan Railroad was incorporated and was given a franchise quite similar to the one just described.[1] This franchise, however, limited the rate of fare to five cents per passenger for any distance between the termini of the main railway, or between the termini of either of the branch railways, or between either terminus of the main railway and the terminus of either of the branches. In addition to ordinary taxes on property, the company was made liable to a license tax for its vehicles in the cities of Washington and Georgetown. It was also enacted that all companies already organized in the District of Columbia for street railway purposes should be subject to pay such license fee. This company was required to submit to Congress annually a full report of its affairs, business and condition signed and sworn to by the president and treasurer of the company, or by a majority of the board of directors. It was stipulated that this report should specify the amount of capital stock fixed by the company's charter; the amount subscribed and actually paid in in cash; the dividends paid to stockholders on the company's capital stock; the funded debt of the company, with a

[1] Laws Relating to Street Railway Franchises, *already cited*, p. 161.

statement as to the manner in which it was secured; the company's floating debt; the cost of the road and of the materials and labor used in its construction; the cost of engineering and salaries; the amount expended in repairs on the road; the cost of equipment; the number and cost of cars; the number and cost of horses and mules; the cost of harness and other appointments used in connection with the road; the cost of tools, fixtures and business furniture; the cost and characteristics of real estate and its improvements; the total length of the road in single track, including switches and turnouts; the weight and character of the rails; the number of passengers carried; the total receipts from passenger and other service; the expenses of operation, maintenance, salaries, and wages; the amount paid for taxes and insurance; the amount paid for reconstruction and repairs of tracks; the amount of dividends paid and of stock dividends declared during the year; any increase of capital stock that may have taken place, and the number of persons killed or seriously injured, together with the causes of such deaths or injuries. It was made the duty of the company when its road was completed to keep passenger tickets at its office for sale in packages of twenty-five or more at the rate of 25 for $1.

369. The model street railway franchise of Washington.— In the compilation of laws relating to street railway franchises in the District of Columbia prepared by Daniel E. Garges, secretary to the Engineer Commissioner, March 4, 1905, it is stated that the charter of the Capital Railway Company is considered a model of street railway charters. This charter was granted March 2, 1895, and gives the right to construct and operate a street railway with cars for carrying passengers, parcels, milk and truck along specified routes, which, however, were made subject to modification or extension at the will of Congress.[1] This grant also provides that whenever the roadway of any street occupied by the company is widened, one-half of the cost of widening and of the improvement of the widened part is to be charged against the company. Under the act providing for a permanent form of government for the District of Columbia passed June 11, 1878, all street railway companies in the District are required to pay the cost of paving between their exterior rails

[1] "Laws Relating to Street Railway Franchises," *already cited*, p. 49.

and for a distance of two feet on either side, and to keep this space in repair.[1] If the companies neglect or refuse to do the work themselves, the commissioners of the District may do it, and then if the companies fail or refuse to pay the cost, the commissioners may issue certificates of indebtedness bearing interest at ten per cent per annum until paid and constituting a lien upon the property and franchises of the companies. Moreover, if these certificates are not paid within one year, the commissioners may proceed to sell the property at public auction to the highest bidder. The Capital Railway Company's franchise provides that the cost of a street widening charged against the company may be collected in the same manner as paving charges under the act of 1878. Whenever the company's route coincides with a country road of less width than sixty-six feet, the railway is to be constructed entirely outside the road. All rails, electrical and mechanical appliances, conduits, stations, etc., used in connection with the railway must be approved by the commissioners of the District of Columbia. The company is not permitted to use overhead wires within the limits of the old city of Washington, and if overhead wires are used in the suburban districts, the company must furnish and maintain free of charge such lights along its line as the commissioners may direct. Whenever the grade of any street is changed, or when any street improvement is made, the company must at once change its railway and the pavement so as to conform to the new situation. Whenever the company's trenches or excavations interfere with any gas or water pipes, or any subways or conduits, or any kind of public work, the expense of changing such underground construction is to be borne entirely by the company. Moreover, before commencing work on its road in any street, the company is required to deposit with the treasurer of the United States such sum as the Secretary of War may consider necessary to defray all the expenses that may be incurred in connection with the inspection of the work, in making good any damages done by the company or its agents in the process of the work, and in completing any of the work which the company may neglect to finish. This fund must also cover any expense of any work which the Secretary may consider

[1] Laws Relating to Street Railway Franchises, *already cited*, p. 257.

necessary for the safety of underground fixtures already in the street. Furthermore, the Secretary may require the company to deposit additional sums from time to time as necessity arises. Any balance remaining of these deposits at the end of one year after the completion of the railroad is to be returned to the company. Even the company's engine houses, boiler house and other buildings necessary for the successful operation of its railroad and constructed on private property, are to be placed at convenient points subject to the approval of the commissioners. In this original charter it is stipulated that the company shall commence the construction of its line within one year and complete it within three years, and that in default of such commencement or completion within the time specified, all the rights, franchises and privileges contained in this grant shall immediately be forfeited.

By an act passed May 28, 1896, the company's route was amended, the use of its cars was limited to carrying passengers, and it was stipulated that within the city of Washington a double-track railway should be constructed and that the company's line should be commenced within three months and completed within one year from the date of this act, with the exception that for certain outlying extensions it was given two years' time.[1] It was further provided by this amendment that failure to complete certain specified extensions should operate to repeal the authority to build such portions of the road, but not to repeal the company's charter.

Under the original act of 1895, the company was authorized to propel its cars by cable, electric or other mechanical power except steam power in locomotives, and except overhead trolleys within the limits of the city proper. If electric power by trolley was used, the company was to be liable for all damages resulting therefrom to subsurface metal pipes and to other public or private property.

In case any of the company's routes coincided with the routes of any other street railway company, the tracks were to be used by both companies in common upon such fair and equitable terms as might be agreed upon, or if the companies could not agree then as might be determined by the supreme court of the District of Columbia on petition of either party, but in any such case neither company was to be

[1] Laws Relating to Street Railway Franchises, *already cited*, p. 56.

permitted to use the connecting track as a depot or general stopping place to wait for passengers, except that this provision was not to interfere with a station already established on an existing line. The company was required to maintain passenger houses, subject to the direction of the commissioners of the District, and to use first class cars with all the modern improvements for the convenience, comfort and safety of passengers. Cars were to run as often as public convenience might require, according to a time-table which was to be subject to the approval of the commissioners of the District. Failure to comply with any of these conditions relating to cars and service would render the company liable to a fine of $50. The commissioners were authorized to make binding regulations as to the rate of speed, the mode and use of tracks and the removal of ice and snow by the company. For wilful or negligent violation of any such regulation a maximum penalty of $500 was fixed.

The company was authorized to issue its capital stock to an amount not exceeding the estimated cost of construction and equipment of its road, and to issue bonds not to exceed the cost of construction alone. It was provided, however, that the company's stocks and bonds issued should not in the aggregate exceed the actual cost of the right of way, construction and equipment.

It was expressly provided that all articles of value inadvertently left in any of the company's cars were to be taken to its principal depot and entered in a book of record of unclaimed goods, which was to be open to public inspection at all reasonable hours of business.

The company was required to make an annual report to Congress through the commissioners of the District, showing the names of all the stockholders and the amount of stock held by each, together with a detailed statement of all receipts and expenditures for the preceding year, and such other facts as might be required by any general law of the District. This report was to be filed on or before the first day of February, and in case of the company's failure to make the report at the time specified or within ten days afterwards, such failure would in itself operate as a forfeiture of the charter. The company was to pay the District "in lieu of personal taxes upon personal property, including cars and motive

power," four per cent of its gross earnings. This percentage payment was to be in lieu of all other assessments of personal taxes upon its property used exclusively in the operation of its railway. Moreover, it was expressly stipulated that the tracks should not be taxed as real estate. Tickets were to be sold within the limits of the District of Columbia at the rate of six for twenty-five cents. The regular cash fare was to be five cents. The free use of the roadway by the company was not to be interfered with. Anyone unlawfully obstructing the passage of the company's cars or in any way molesting the passengers or operatives while in transit or destroying or injuring the company's cars, depots, stations or other property was to be fined for each offense not less than $25 or more than $100.

This franchise made provision to the effect that no person should be prohibited from traveling on the company's road or be ejected from its cars except for drunkenness, disorderly conduct, contagious disease, refusal to pay the legal fare or refusal to comply with the lawful general regulations of the company. The right to use condemnation proceedings to secure a strip of land not more than twenty feet wide wherever required on private property, was given to the company.

It should be noted that in this charter or franchise Congress, according to its usual policy, reserved the right to amend, alter or repeal the act at any time.

370. Advantages of the indeterminate franchise in Washington illustrated. —The effectiveness of the indeterminate franchise in leaving with the public authorities continuous control of the street railways is illustrated by the act of May 23, 1908, granting certain extensions to four different companies and requiring the readjustment of tracks in connection with the opening of the new Union Depot. This act not only granted extensions to the different companies, but required them to remove their tracks and appurtenances from certain specified streets, and to restore the pavements between and about their rails. Certain underground electric lines were to be commenced within thirty days and completed by May 1, 1909; otherwise all the corporate rights, franchises and privileges of the street railway company in default would immediately be forfeited, unless for good cause the commissioners should extend the time for the completion of the new

lines, but such extension of time was not to exceed a period of six months. Wherever routes were covered by the franchises of more than one company, only one set of double tracks was to be laid and these tracks were to be used in common. Transfers were not to be issued, sold or given away except to passengers entitled to them, and anyone violating this provision was to be subject to a fine of not more than $25. All companies operating within the District were required to supply and operate a sufficient number of cars, "clean, sanitary, in good repair, with proper and safe power, equipment, appliances and service, comfortable and convenient, and so operate the same as to give expeditious passage, not to exceed fifteen miles per hour within the city limits or twenty miles per hour in the surburbs, to all persons desirous of the use of said cars, without crowding said cars." The Interstate Commerce Commission was given express authority to compel obedience to these provisions and to make, alter and amend all needful rules and regulations to secure such obedience. For a violation of any of these provisions the company or its officers or employees would be liable to a fine of not more than $1000. Each day of failure or neglect to obey the requirements of the law, or the orders or regulations of the commission made in pursuance of law or ordinance, was to be regarded as a separate offense.

The general features of street railway franchises in the District of Columbia may be summarized as follows:

Franchises are indeterminate.

The underground electric system is required except in the suburbs.

The cash fare is five cents, but tickets must be sold at the rate of six for a quarter.

The companies must pay a tax of four per cent on their gross receipts in lieu of personal taxes, and must also pay taxes on their buildings as real estate.

Extensions may be ordered, and abandonment or relocation of routes may be required at any time, by act of Congress.

371. Competition under early franchises gave bad street railway service in Boston.—Street cars were first operated in Boston in 1856.[1] It is said that the opposition to the intro-

[1] See "The Street Railway System of Metropolitan Boston," William H. Baldwin

duction of street railways was so bitter that the tracks in one of the suburbs were repeatedly torn up at night. However, the horse-car lines proved successful almost immediately and the number of companies multiplied, each receiving a special charter from the state legislature. Mr. Pinanski, in his essay on the street railway system of metropolitan Boston, says that immediately following the introduction of street railways, "many charters were obtained which were never used, and many small roads were built long in advance of any sufficient demand to justify their cost." [1] There were, however, four great lines which made many extensions from time to time, "some because they were needed, others merely to prevent the formation of rival companies." The first charters limited the duration of the companies to fifty years, and authorized them to lay and operate tracks on the locations granted by the municipal authorities.[2] Shortly thereafter acts were passed providing that the mayor and aldermen of a city, after the expiration of one year from the opening of a street railway, might revoke the locations and cause the tracks to be removed. Rates within the city of Boston were limited to five cents unless a higher rate should be charged with the consent of the city authorities. The companies were required to maintain the portion of the streets and bridges occupied by their tracks. One act passed in 1855 defined the portion of the roadway to be kept in repair by the company as "the space between the rails and so much on each side thereof as shall be within the perpendicular let fall from the extreme width of any car or carriage used thereon, being the space from which the public travel is excluded during the passing of said car or carriage." Like the earliest street railway grants of several other eastern cities, all the charters granted to street railway companies of Boston in the early days kept the way open for future municipal ownership. The right was reserved to the city to purchase "all the fran-

prize essay for 1907–8, by A. E Pinanski, p. 10. *See* also, "Report of the Special Committee appointed to investigate the relations between cities and towns and street railway companies," published by the State of Massachusetts, February, 1898, as House Document No. 475.

[1] *Work cited*, p. 11.

[2] *See* Appendix A of report of Special Committee, *already cited*, containing report of Walter S. Allen, Secretary, p. 62. It should be noted that in Massachusetts local franchises are described as "locations." The theory is that the companies receive from the state the right to use the streets, subject to the right of the local authorities to designate the particular streets that shall be used, or to refuse locations altogether.

chise, property, rights and machinery of the company at any time after the expiration of ten years from the opening of any part of the road, by paying for these rights such a sum as will reimburse to each person who may then be a stockholder therein, the par value of his stock, together with a net profit of ten per cent per annum from the time of the transfer of said stock to him on the books of the corporation, deducting the dividends received by said stockholder thereon." A general law was passed in 1863 governing the joint use of tracks by different companies. The first comprehensive general law covering the subject of street railways in Massachusetts was passed in 1864. In this law the provision for municipal purchase and the limitation upon the corporate life of the companies were both omitted. The obligation of the companies to maintain the street was defined, however, as including the space between the tracks and 18 inches on either side. The practice of organizing street railway companies by special legislative act continued, however. Mr. Pinanski states that in 1872 the Highland Street Railroad Company was chartered for the avowed purpose of competing with the Metropolitan Railroad Company for the traffic along the latter company's original line between Roxbury and the city proper. He also states that in 1881 the Charles River Street Railway Company was incorporated to compete with the Cambridge Railroad Company. Speaking of these new lines, he says: [1]

"Their very existence depended upon the business which they could secure on the tracks of other companies and they sought to encroach wherever they could. Naturally, this excited much bitter feeling, and the management of the other railways determined that the so-called piratical roads should not do a profitable business on their tracks. It is a well-known habit of the public to take the forward of two cars running near together, even if it be crowded; and the Metropolitan and Cambridge roads were at great pains so to arrange their time-tables as to have a car of theirs lead every car of other roads on their tracks; and the other roads would keep shifting their time-tables to prevent this. Employees had almost partisan feeling, and there was a general practice of racing cars to get in ahead; and the car that was left behind would fall back and go as slowly as possible so as to get passengers from the car in the rear."

372. Consolidation of Boston street railways under special legislation.—After years of bad service and congested traffic,

[1] *Work cited*, p. 15.

two new companies were incorporated under the general laws in 1886. This new movement toward competition resulted in a general consolidation of the old and new companies under the name of the West End Street Railway Company in 1887. By the special act authorizing this consolidation, provision was made for the issuance of eight per cent preferred stock of the new company in exchange for the outstanding capital stock of the various constituent companies, the entire amount being limited to $6,400,000.[1] The new company was also protected from the arbitrary revocation of its franchises by the local authorities, a provision being inserted in the law to the effect that "no location and no alteration or revocation of location of a street railway, and no authority to run cars over or use the tracks of another street railway, whether surface or elevated, in the cities of Boston and Cambridge, or in the town of Brookline, shall hereafter be valid until approved by the board of railroad commissioners." It should be stated that the Massachusetts board of railroad commissioners had been given general supervision over street railways as early as 1871.

The transit situation in Boston continued to be acute in spite of the improved service resulting from consolidation. The necessity of subways and elevated railways was recognized. In 1893 the mayor of Boston was authorized to appoint a board of subway commissioners. This board developed into the Boston Transit Commission which has since constructed several subways. The first of these, opened in 1897, was constructed primarily for the purpose of providing a means for the removal of the surface cars from portions of Tremont and Boylston streets, which had become intolerably congested.

In 1894 the Boston Elevated Railway Company was incorporated by special act of the legislature with power to acquire by lease or purchase other lines of street or elevated railway.[2] By a special act passed in 1897 for the promotion of rapid transit in the city of Boston and vicinity, the charter of the Boston Elevated Railway Company was amended and its elevated franchises made substantially irrevocable.[3] The

[1] *See* "Massachusetts Street Railway Legislation," published by the Boston Elevated Railway Company, 1901, pp. 9–14, Acts of 1887, Chapter 413.
[2] Acts of 1894, Chapter 548.
[3] Acts of 1897, Chapter 500.

company was authorized to establish a rate of fare which should not exceed five cents for a single continuous passage in the same general direction upon the roads owned, leased or operated by it. Moreover, it was stipulated that this maximum rate could not be reduced by the legislature during the period of twenty-five years. It was provided, however, that the state board of railroad commissioners acting upon the petition of the board of aldermen of a city or the selectmen of a town, or fifty legal voters of a city or town in which this company's lines were located, might reduce this rate. But the law expressly provided that "such toll or fare shall not, without the consent of said corporation, be so reduced as to yield, with all other earnings and income of said corporation, . . . a net divisable income, after paying all expenses of operation, interest, taxes, rentals, and other lawful charges, and after charging off a reasonable amount for depreciation, of less than eight per cent per annum on the outstanding capital stock of said corporation actually paid in in cash." It was further stipulated by this act that during the ensuing period of twenty-five years "no taxes or excises not at present in fact imposed upon street railways shall be imposed in respect of the lines owned, leased or operated by said corporation, other than such as may have been in fact imposed upon the lines hereafter leased or operated by it at the date of such operating contract or of such lease or agreement hereafter made therefor, nor any other burden, duty or obligation which is not at the same time imposed by general law on all street railway companies." As compensation for the privileges granted by this act and for the use of the public streets occupied by the company's lines of elevated and surface railroad, a special annual dividend tax was to be imposed during the period of twenty-five years. If in any year the dividend paid was six per cent or less, or if no dividend was paid, then during that year this tax was to be a sum equal to seven-eighths of one per cent of the gross earnings of all the lines of elevated and surface railroads operated by the company. If in any year the dividends paid exceeded six per cent, then in addition to the sum just mentioned, this special tax was to include a sum equal to the excess of the dividends over six per cent. This tax was to be paid into the treasury of the commonwealth and was then to be distributed among the different

cities and towns interested "in proportion to the mileage of elevated and surface main track, reckoned as single track, which is owned, leased or operated by the said corporation and located therein." The company was also required to give free transfers from surface to elevated, or from elevated to surface cars at all stations of the elevated lines reached by surface lines, and also from one elevated car or train to another at junction points, so as to give a passenger a continuous ride in the same general direction. The company was to give such further free transfers on its surface lines as should be satisfactory to the board of railroad commissioners. The company was also given specific authority to "lease and operate the lines, property, rights, locations and franchises of the West End Street Railway Company, and of any other street railways or elevated railroads whose lines may be or become, in whole or in part, tributary to or connecting with its lines, and enjoy all the rights and privileges thereto appertaining and belonging, subject to the duties, liabilities and restrictions thereto appertaining." The lease of the West End Street Railway system was effected on December 9, 1897, and since that date the Boston Elevated Railway Company has operated substantially the entire system of elevated, subway and surface street railroads in Boston and its immediate suburbs. In 1898, pursuant to the recommendations of the special committee appointed by the governor of Massachusetts to investigate the relations between cities and towns and street railway companies a comprehensive general act was passed relating to the taxation and locations of street railways, but by its terms, this act for a period of twenty-five years from June 10, 1897, was not to apply to the Boston Elevated Railway Company, or to any railways then owned, leased or operated by it, or to the opening, widening, paving or changing of grade of any street occupied by its tracks, or to the removal of snow in any such street.[1] The provisions of law at that time applying to this company and its subsidiary lines were to continue in full force during the twenty-five-year period. On account of this exemption, the Boston Elevated Railway Company is still subject to the old requirement that "every street railway company shall keep in repair, to the satisfaction of the superintendent of streets, street commissioner, road commis-

[1] Acts of 1898, Chapter 578.

sioners, or surveyors of highways, the paving, upper planking, or other surface material of the portions of streets, roads, and bridges occupied by its tracks; and if such tracks occupy unpaved streets or roads, shall, in addition, so keep in repair eighteen inches on each side of the portion occupied by its tracks, and shall be liable for any loss or injury that any person may sustain by reason of the carelessness, neglect, or misconduct of its agents or servants in the construction, management and use of its tracks."[1] The company, like other street railway companies in Massachusetts, is subject to a corporate franchise tax on the value of its capital stock. This tax is levied and collected by the state and distributed to the cities and towns in proportion to the length of the company's trackage within their respective limits. The company is also subject to ordinary taxation by the local authorities on its real estate. Mr. Pinanski states that during the year ending September 30, 1907, the company paid out nearly 11 per cent of its gross revenue in taxes, paving charges and subway rentals as follows:[2]

Taxes assessed on capital stock	$578,198.06
Taxes assessed on real estate	265,500.70
Special tax for the use of streets under the act of 1897	123,275.92
Interest on cost of paving laid by the company	167,896.52
Cost of maintaining street paving by the company	130,907.01
Cost of moving snow removed from sidewalks and roofs	20,000.00
Subway rentals	258,644.58
Total	$1,544,422.79

There is a general law in Massachusetts requiring street railway companies to sell tickets for the use of school children at half rates, but by a special act of 1900 the Boston Elevated Railway Company was exempted from this requirement for the period of twenty-five years from June 10, 1897.[3]

Commenting upon the street railway system of Boston, Mr. Pinanski says:[4]

"Broadly stated, the Boston Elevated Railway system, as it is called from its overhead lines, is at present the only one in the world which,

[1] *See* Senate Document No. 9, 59th Congress, First Session, "Report in Respect to Franchises Granted to Street Railway Companies in Principal Cities of the United States," p. 87.
[2] *Work cited*, p. 89.
[3] Acts of 1900, chapter 197.
[4] *Work cited*, p. 40.

controlling all, or nearly all, the passenger transportation lines in a large city, and uniting under one management the service of subway lines, elevated lines, and surface lines, undertakes to carry a passenger between any two points on its system for a single five cents fare."

373. Working men's tickets; gross receipts tax; conditional monopoly; franchise made irrevocable by local grant—New Bedford.—With an elaborate street railway law and stringent and detailed supervision by the state board of railroad commissioners, Massachusetts discourages the imposition of elaborate terms and conditions by the municipal authorities when they grant locations for street railways. The extent to which a city may go even under such circumstances in compelling a street railway company to grant additional concessions, is well illustrated by a franchise granted by the board of public works of the city of New Bedford, to the Union Street Railway Company on May 27, 1898.[1] The company had filed several petitions praying "for a ratification and confirmation of locations of tracks and poles" theretofore granted and for authority "to locate, alter and extend its tracks." After holding public hearings on these petitions, the board of public works voted to make the grants requested upon certain terms, conditions, limitations and restrictions which were adjudged to be in the public interest. These conditions were "to be and remain in full force, and in addition to all the terms, conditions, limitations, duties and obligations which are now or hereafter may be imposed, by law, upon street railway companies under the laws of the commonwealth of Massachusetts, until, by reason of their repugnance to said laws of our commonwealth, the terms, conditions, limitations and restrictions herein and hereby imposed became void by operation of the law." In the first place, the approved plans of the company's locations were to be filed with the board, each one to be endorsed as follows: "This plan is accepted as a true and exact plan and description of the true and actual location of all the tracks, switches, turnouts, rails and poles of the Union Street Railway Company, in and upon the public highways herein designated, in accordance with the decree of this board, passed May 27th, A. D., 1898."

[1] "Franchises Granted by Board of Public Works to Quasi-public Corporations of the City of New Bedford," p. 5.

The company agreed to pay the city the sum of $10,000, which was adjudged to be a fair assessment toward defraying the expense of the widening of a certain street, which had been made necessary by the company's proposed construction of a second track in the street. It was also stipulated that if at any time in the future the board of public works should deem it necessary to widen or alter any street in which the company had been granted a location, and if the board thought that such widening or alteration had been made necessary in whole or in part by the company's occupation of the street, a portion of the cost of the improvement not exceeding "the aggregate amount of all the betterments, assessed upon the abutters," and not exceeding one-fourth of the total cost of the improvement might be assessed against the company. This provision would cease to be operative, however, whenever the state legislature passed a general law providing for assessments upon street railway companies for the benefit of cities and towns in cases of the widening or alteration of streets.

The company was required to issue at its general office at all times during business hours special ten-trip tickets for thirty cents each. These tickets were to be accepted in lieu of cash fares over all the company's lines within the city limits between five and seven o'clock in the morning, except on Sundays and legal holidays, and also upon special workingmen's cars operated on certain lines between six o'clock and half-past six in the evening. These tickets were to entitle passengers to free transfers to all intersecting lines.

The company was also required to pay as compensation for its franchise the sum of $3,000 a year. It was stipulated, however, that if the state legislature should enact a law imposing a tax to be levied on street railway companies by the cities and towns of the commonwealth in addition to the taxes already authorized, the payments of the Union Street Railway Company should be adjusted to the terms of this new legislation; that is to say, if the amount of any such tax was less than $3,000 a year, the city would remit the difference to the company and if the tax was more than that sum, the company would have to make up the difference. Moreover, in case there should be no change in the state law, and in case the $3,000 payment should at any time be less than a sum equal to one and one-half per cent of the company's

gross receipts from all sources chargeable to its tracks within the city limits, then the company was to make up the difference. It was provided that in all cases where the surface of the streets was disturbed by the company's operations, it should be replaced at the company's expense to the reasonable satisfaction of the city authorities. The city was to be indemnified against any damages that might result from injury to persons or property caused by "any unlawful defect or want of repair" in the portion of the street occupied by the company's tracks and appliances, or by reason of the company's failure to remove snow and ice from the streets, whether such snow and ice remained within the location of the company's tracks or had been deposited in other portions of the street.

All of the conditions just described, relating to payments, sale of workingmen's tickets and street obligations, were made contingent upon the city's not granting to any other street railway company without this company's consent, unless compelled to do so by legislative enactment, the right to use this company's tracks or to construct tracks on other streets south and east of a certain designated line in the city. Indeed, the city went so far as to promise that in case it granted such a competing franchise, it would pay back to the company the $10,000 required as a contribution for a certain street widening, with four per cent interest on the money from the date when it had been received from the company. This company's monopoly was not, however, to prevent the city from granting to other companies, operating street railways outside of the city limits, locations to enable them to convey their passengers received outside of the restricted territory to some central terminal point in the city.

It was expressly decreed that in consideration of the true performance by the company and its successors of all the conditions contained in this grant and of all further orders thereafter passed by the board pursuant to law and not inconsistent with this franchise, the grant should continue to "be and remain in full force and virtue and binding upon said company and upon said city." Any unreasonable failure or neglect on the part of the company to fulfill the conditions of the grant, however, would render it void. The franchise was granted on the express condition that it be formally accepted by the company.

374. Street railway locations in Massachusetts.—The conditions imposed by the local authorities in Massachusetts in connection with the granting of locations are of minor importance as compared with the provisions of the general street railway law. Original locations for street railways in a city or town must be acquired in accordance with a prescribed procedure. The company desiring a location must file a petition with the board of aldermen of the city or the selectmen of the town, as the case may be, who after giving fourteen days' published notice must hold a public hearing in regard to the application.[1] If the city authorities determine that public convenience and necessity require the construction of the proposed railway, they have authority to grant the location asked for, or any part of it. At the same time they "may prescribe how the tracks shall be laid, and the kind of rails, poles, wires and other appliances which shall be used, and, in addition to the general provisions of law governing such companies and in respect of matters not treated of in such provisions, impose such other terms, conditions and obligations, incidental to and not inconsistent with the objects of a street railway company, as the public interests may in their judgment require." No location granted by local authorities is valid, however, until the board of railroad commissioners, after public notice and a hearing, has certified that the location is consistent with the public interest. If the railroad commissioners require an alteration in the location, before issuing such a certificate, the local authorities are notified and permitted to amend the location in accordance with the suggestions of the commissioners. If the proposed alteration involves a change of route, public notice and a hearing must be given as in the case of an original application for a location. After the board of railroad commissioners has issued its certificate, the location is finally validated upon the filing of a written acceptance by the company. A location granted by the local authorities but not certified by the railroad commission, or not accepted by the company, is void. The location is also void unless the company applies for the certification of the railroad commission within thirty days after the grant is made by the

[1] "General Laws of Massachusetts Relating to Railroad Corporations, Street Railway Companies and Electric Railroad Companies," published by the Massachusetts Railroad Commission, 1902, p. 122c.

local authorities, and unless within eighteen months after such certification the company completes its organization.

In any city or town already having a system of street railways, the board of aldermen or the selectmen may grant a company a location for an extension of tracks, either upon petition of the company or upon petition of fifty legal voters.[1] As in the case of an original grant, however, public notice and a hearing are required. Moreover, the local authorities are not permitted to impose any terms or conditions in addition to those imposed by general laws on street railway companies in force on the first day of October, 1898, or such as may have been imposed in the grant of the original location to the company subsequent to that date.[2] No extension of a location is valid, however, until approved by the railroad commission, which may, before approval, require an alteration in the extension the same as if it were an original location.

An alteration of the location of a street railway company may be made upon the petition of the company, or of any interested party, in the same manner and subject to the same conditions as apply in the case of extensions, except that the expense of such alteration is to be borne "by such party or parties and in such proportions, as the board of aldermen or selectmen may determine." After the expiration of one year from the opening for use of a street railway in any city or town, and after public notice and a hearing, the board of aldermen or the selectmen, as the case may be, "if the public necessity and convenience in the use of the streets so require, may, for good and sufficient reasons to be stated in the order therefor, revoke the location of a street railway in any highway or street in said city or town."[3] However, unless the company gives its written consent to such order of revocation within thirty days after its date, the order will not be valid until approved by the railroad commission after public notice and a hearing. When an order of revocation has been approved, the company is required within thirty days to remove its railway in accordance with the order and put that part of

[1] General Laws of Massachusetts Relating to Railroad Corporations, etc., *already cited*, p. 143a.

[2] Acts of 1909, Chap. 417. All locations granted and in use prior to the date mentioned in the text were ratified and confirmed by Chapter 578 of the Laws of 1898, passed after the report of the special committee on the relations between cities and towns and street railway companies had been submitted.

[3] General Laws, etc., *already cited*, p. 144.

the street surface disturbed by such removal in as good condition as the adjacent portions of the street.

375. General powers and obligations of Massachusetts street railway companies.—The superintendent of streets of any Massachusetts city is required to establish regulations for the clearance of snow from the street railway tracks and for its removal by the street railway company, but a company may not be required to remove an amount of snow greater than has been cleared from between its rails and its tracks and from a space eighteen inches wide on either side.[1] A street railway company is permitted to allow street sprinkling cars to be used on its tracks subject to regulations and restrictions approved by the railroad commission.[2] A company may also, with the consent of the local authorities, convey in its cars snow, ice, stones, gravel, dirt or street sweepings taken from the streets in which the tracks are located for the purpose of keeping them in proper condition for travel, and may also convey over its lines necessary materials for use in the construction or repair of streets. The joint use of tracks is no longer compulsory in Massachusetts, but any street railway company is authorized to permit another company to operate over its tracks "to such extent and under such rules and regulations as the board of railroad commissioners shall determine to be consistent with public safety."

Any Massachusetts street railway company, except in the city of Boston, may with the approval of the railroad commission "acquire, hold, maintain and equip land for the purposes of recreation and for pleasure resorts."[3] Admission to such grounds must be free, however, subject to restrictions imposed by the local authorities with the approval of the state board, and no intoxicating liquors may be sold on such grounds.

All street railway companies in the state are authorized to transport milk and cream over their lines subject to the supervision of the railroad commission.[4] A street railway company may also act as "a common carrier of newspapers, baggage, express matter and freight in such cases, upon such parts of its railway, and to such extent, in any city or town, as, after public notice and a hearing, upon the petition of any inter-

[1] General Laws, etc., *already cited*, p. 147.
[2] *Ibid.*, p. 134.
[3] Acts of 1895, Chapter 316.
[4] Acts of 1908, Chapter 278.

ested party, the board of aldermen or the selectmen in such city or town and the board of railroad commissioners shall by order approve." [1]

If a street railway company voluntarily discontinues the use of any part of its tracks for a period of six months, such abandoned tracks must be removed at the company's expense upon the order of the local authorities.[2] If the company discontinues the use of any track "without right or lawful excuse," and refuses to operate the track when requested to do so by the local authorities, the latter may file a petition with the supreme judicial court to compel the company to resume the use of such track and "to perform all its corporate duties relating thereto." When any such petition is filed, the court is required to serve notice on the street railway company and to "advance the cause to speedy hearing and final decision." The court is given jurisdiction in equity to determine the cause and enforce its decrees in such cases.

No street railway company, unless expressly authorized by its charter or by special law, may issue bonds, notes or other evidences of indebtedness running for longer periods than twelve months exceeding in the aggregate the amount of its capital stock actually paid in at the time such securities are issued.[3]

Every street railway company is required to furnish "reasonable accommodations for the conveyance of passengers," and may be required to increase its facilities by order of the board of railroad commissioners.[4] Cars for special service may be provided at special rates. Companies may also make special rates for working men and working women on week days between five and seven o'clock, both in the morning and in the evening. Street railway companies are required to carry school children at half rates. Free tickets or passes to public officials or any persons in the employ of the public, except policemen, firemen and letter-carriers in uniform, is forbidden.[5] But passes may be issued by the company to its directors or to any one connected with it in an executive capacity.

The companies are compelled to equip their cars with such

[1] Acts of 1907, Chapter 402.
[2] General Laws, etc., *already cited*, p. 147.
[3] *Ibid.*, p. 156.
[4] *Ibid.*, p. 152.
[5] *Ibid.*, p. 153.

fenders, wheelguards and emergency tools as may be required by the railroad commission.[1] The commission is itself required to compel street railway companies to heat their cars "at such times, by such means, and to such extent, as said board shall determine." All passenger cars must be equipped with enclosed platforms for the protection of conductors and motormen during the months of December, January, February and March. A day's work for conductors and motormen is limited to ten hours so arranged by the employer that it may be performed within twelve consecutive hours. On legal holidays and on days when the company has to provide for extraordinary travel, as well as in cases of accident or unavoidable delay, extra labor may be performed for extra compensation.[2]

376. Taxation of street railway companies in Massachusetts.—The special committee appointed in 1897 recommended that street railway companies be relieved of the obligation to keep any portion of the streets clean and in repair, and that in lieu of such obligation a pavement and cleaning tax be levied against them.[3] As a result of this recommendation, it was enacted that "a street railway company shall not be required to keep any portion of the surface material of streets, highways and bridges in repair, but it shall remain subject to all legal obligations imposed in original grants of locations, and may, as incident to its corporate franchise, and without being subject to the payment of any fee or to any other condition precedent, open any street, highway or bridge in which any part of its railway is located for the purpose of making repairs or renewals of the railway."[4] The companies are, however, required to restore the pavements disturbed by them in the course of original construction, or in the subsequent alteration, extensions, repair or renewal of their tracks. In commutation of the old paving obligation, a special excise tax is levied on each company's annual gross receipts per mile of track. For the purposes of this tax, the company is required to report annually to the board of assessors in every city and town where it operates, the length of its track operated in the streets

[1] General Laws, etc., *already cited*, p. 151.
[2] *Ibid.*, p. 152.
[3] Report of Special Committee, *already cited*, p. 27.
[4] General Laws, *already cited*, p. 148.

of the city or town, the total length of its track in streets and the amount of its gross receipts derived from the operation of its railway during the preceding year.[1] The company's report is to show "the total length of all tracks operated by it including sidings and turnouts whether owned or leased by it or over which it has trackage rights only," measured as single track. The report of gross receipts is to exclude income derived from the sale of power or the rental of tracks, and from miscellaneous sources. The commutation tax is to be levied on the basis of a percentage of the company's annual gross receipts for each mile of track located within the city or town as follows:

If $4,000 or less, one per cent.
If more than $4,000 and less than $7,000, two per cent.
If more than $7,000 and less than $14,000, two and one-quarter per cent;
If more than $14,000 and less than $21,000, two and one-half per cent;
If more than $21,000 and less than $28,000, two and three-quarters per cent;
If $28,000 or more, three per cent.

There is a provision of the law, however, permitting the local authorities to apply to the railroad commission for a revision of the amount of this tax. In case any such application is made, a public hearing is held at which the local authorities and the company may submit evidence to determine the average annual cost to the city or town of the work done by it during the three years preceding, which, prior to October 1, 1898, had been required of the companies. If the railroad commission finds that the average annual cost to the municipality of such street work is greater than the average annual payment of the company under the commutation tax, it is required to readjust the percentage of gross receipts to be paid by the company so that such payments will cover the average cost of street repairs as shown by the evidence. All sums paid under the commutation tax law must be applied by the city or town, "toward the repair and maintenance of the public ways and the removal of snow therefrom."[2]

All street railway companies in Massachusetts are subject

[1] General Laws, etc., *already cited*, p. 162. [2] Acts of 1907, Chapter 318.

to a "corporate franchise tax" levied by the commonwealth.[1] Each company is required to report annually to the tax commissioner the amount of its capital stock and the par value and market value of the shares, as of the first day of May. The company must also report in detail its "works, structures, real estate and machinery," subject to local taxation, and the value of such property. It must also report the entire length of its line reduced to a basis of single track, the length of its line located within the state, and the length of track operated by it in each city and town separately. The state commissioner is required to ascertain the true market value of the company's shares and to estimate the fair cash value of the company's entire outstanding capital stock in order to arrive at the value of its corporate franchise. From this valuation is subtracted a proportionate amount for that part of the company's trackage, if any, lying outside the state. There is also subtracted the value of the real estate and machinery subject to local taxation within the state. Upon the sum remaining after these deductions, a tax is levied "at a rate determined by an apportionment of the whole amount of money to be raised by taxation upon property in the commonwealth during the same year as returned by the assessors of the several cities and towns . . . upon the aggregate valuation of all cities and towns for the preceding year." The tax so levied is distributed to the various cities and towns in accordance with the distribution of the track mileage of the street railways. Provision is also made for an additional corporate franchise tax under certain circumstances.[2] This additional tax is equal to the sum which any company pays in dividends in excess of eight per cent on its capital stock, but the tax is not imposed unless from the date when the company commenced to operate its railway it has paid "dividends equivalent in the aggregate to at least six per cent per annum upon its capital stock from year to year."

[1] General Laws, etc., *already cited*, p. 159.
[2] *Ibid.*, p. 161.

CHAPTER XXVIII.

EXCLUSIVE STREET RAILWAY FRANCHISES.

377. Significance of exclusive grants.
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379. Competing franchise granted; right to use streets not entirely exclusive; extensions required.—Des Moines Broad Gauge Street Railway Company's ordinances.
380. City attempts to repeal exclusive franchise; street railway abuses alleged.—Des Moines.
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382. Franchise conditions prescribed by the general laws of Iowa now in force.
383. Locations in particular streets may be revoked; exclusive franchise granted by state; transfers strictly defined; state tax on surplus dividends.—Providence.
384. Exclusive franchise for fifty years; extensions required from time to time by the city.—Minneapolis.
385. Franchise for all streets; original right of purchase surrendered; conflict over extensions.—St. Paul.
386. A general street railway, light, heat and power franchise practically exclusive for three years; tax on net earnings; regulation of rates by city.—Topeka.
387. All streets covered; twenty-four tickets for one dollar; shade trees to be protected; bell to be rung at street crossings; city to bear expense of removing tracks.—Wichita.
388. An exclusive franchise repealed by implication.—Wilmington, Del.

377. Significance of exclusive grants.—A street railway franchise may be exclusive in the sense that the company to which it is granted has a guaranteed monopoly of the entire street railway business within the limits of the city where it is operating. In many of the commonwealths, complete exclusiveness of this type is unconstitutional. A company may, on the other hand, simply have exclusive rights in the streets occupied by its tracks, so that no other company can acquire the right to lay additional tracks in the same streets, or to use the tracks already laid, without the first company's consent. Everywhere in the state of New York this type of exclusiveness prevails. A company already having tracks in the street is in a position to veto absolutely a project involving the construction of additional

tracks in the same street. No matter what the local authorities and the property owners may desire, the company already in the street can maintain its position for any reason that is satisfactory to it, or for no reason at all, except that joint use of tracks may be authorized for a distance of not more than 1000 feet. Still another degree of exclusiveness is found in franchises which give the company the exclusive use of the tracks and fixtures constructed by it. This type of exclusiveness is perhaps more the rule than the exception, although in many cities, and indeed by general law in some of the states, the right to use existing tracks at strategic points or for certain limited distances may be given by the public authorities to a new company. In this chapter we shall deal primarily with franchises that are exclusive in the first sense, that is to say, franchises under which the companies enjoy a complete and unqualified monopoly in street railway transportation in a given city by virtue of specific grants. Such franchises are rather exceptional, and some of them are conditioned upon the company's acceptance of the natural obligations of monopoly to extend the service to meet reasonable public demands. The street railway grants of Des Moines, Providence, Minneapolis, St. Paul, Topeka, Wichita and Wilmington, Del., will be discussed as typical grants of this kind.

378. Grant exclusive for thirty years; all streets covered; division of net earnings; detailed rules and regulations—The earliest street railway franchise in Des Moines.—The early street railway franchises of Des Moines were granted prior to the enactment of the somewhat stringent provisions of the present laws of Iowa relating to public utility grants. On December 10, 1866, the first street railway ordinance was granted by the city to the Des Moines Street Railway Company, by which the company was authorized to lay single or double tracks for passenger railway lines "in, upon, and along all the streets, and such alleys only fronting on which said company has depots, stables, or car-houses, and over the bridges and such streets in the City of Des Moines, with their present and future extensions and connections." Cars were to be operated by animal power only and the tracks were not to be connected with any other railway on which other power was used. The railways were to be used ex-

clusively for the purpose of transporting passengers and their ordinary baggage, with the exception that the company was authorized to use the tracks for the transportation of its construction materials and for such other purposes as might be necessary from time to time in carrying out any contract between the company and the city. The company was required to pave or otherwise improve the space between the rails and the tracks whenever the streets occupied by it were improved by the city. There was to be no liability upon the city for damages suffered by the company on account of the breakage of any gas or water pipes or on account of delays made necessary by the construction or repair of sewers, or by the improvement or repair of any street, or by the construction or repair of sewers, water pipes and gas pipes "unless there be unreasonable delay in making such repairs." In all cases single track construction was to be in the center of the street, and where double tracks were laid, they were not to be located within twelve feet of the sidewalks "upon any street in any case where it is practicable to be avoided." The rate of fare on any one line or route of the railway was limited to ten cents per passenger for the first five years after the completion of the first mile of track, and to six cents per passenger after the expiration of that period. The company was required to equip at least one mile of track and have it in operation by January 1, 1869; one additional mile within two years thereafter, and a third mile within two years after that, unless the city council granted the company a further extension of time. Failure to construct the amount of track specified within the time limit set would result in the forfeiture of the franchise. Allowance was to be made, however, for time lost by reason of the orders of any court, if immediate notice of such orders was given to the mayor and the city solicitor. In case of receiving such notice, the mayor was to appoint the city solicitor "to resist such injunction or order, and to obtain a dissolution of the same, or to assist the attorney of said company," but the company was to pay the city solicitor a reasonable fee for services rendered in any such case.

It was stipulated that the right granted to the company to operate the railway "shall be exclusive for the term of thirty (30) years from the time the first mile of said track is laid

and cars running thereon, and the said city of Des Moines shall not, until after the expiration of said term, grant to or confer upon any person or corporation any privileges which will impair or destroy the rights and privileges herein granted to said company." It was stipulated that after the year 1875, whenever there were any fair grounds or other places of public resort in or near the suburbs "to or near which the said railway company shall have no track laid connecting the same by a direct route with some central part of the city" or with some other route running to the heart of the city, the city council by a two-thirds vote could require the company to construct such direct or connecting route. In case the company should fail or neglect to build it within one year from the date of notice, then the city council might grant a franchise for the route to any other company who might be prepared to build and equip it within the same time and to operate it upon the same terms as the company to which this franchise was given.

On or before February 1, of each year, the company was required to make a statement to the city treasurer of its net receipts for the preceding calendar year, and thereupon there was to be levied a tax of three per cent on such receipts. This tax was to be in lieu of all other taxes and assessments for all city purposes.

Some of the rules and regulations laid down in this old franchise seem quaint when read in the light of later experience. The speed of cars was limited to six miles an hour. The horses or mules were not to be driven faster than a walk while the cars were turning corners from one street to another. Cars driven in the same direction were not to approach nearer than 200 feet, except in cases of necessity or accident or when cars were near their stations. Cars were not to be left standing in the street at any time except with their teams attached and while waiting for passengers, or for other proper purposes. It was stipulated that no car should be allowed to stop on a cross walk or on any intersecting street, except to avoid collision. The conductors and drivers employed by the company were to use reasonable care to prevent injury to persons, or to other vehicles. Conductors were required to announce to passengers in a distinct tone the names of all cross streets as the cars approached them,

and also to announce the lines of any other railway company crossed by the cars. After sunset the cars were to be provided with signal lights and no car could remain standing at any station more than ten minutes, except at stations for watering horses and at each end of the lines, and at the stations nearest the passenger depots of other companies. The company was required to file a written acceptance of this ordinance within thirty days after its publication.

By two different amendments of this ordinance the company's time for construction was extended and in 1885 the company received a similar ordinance from the town of North Des Moines, which later became a part of the city.

379. Competing franchise granted; right to use streets not entirely exclusive; extensions required—The Des Moines Broad Gauge Street Railway Company's ordinances.—On June 29, 1886, in apparent violation of the thirty-year exclusive feature of the grant made twenty years before to the Des Moines Street Railway Company, the city of Des Moines gave a franchise to the Des Moines Broad Gauge Street Railway Company. This later grant was for a period of twenty-five years and covered certain streets and alleys specified in the ordinance "and such other streets and alleys of said city as said company may hereafter select with the consent and approval of said city." It would appear that this clause was intended to give the company the right to extend its system indefinitely, but with the reserved right on the part of the city to prevent the use of particular streets where street railways were not desired. This franchise specified that the cars should be "of the best style and class used in other first-class cities of this country." Like the preceding grant, this one was limited to the purpose of transporting passengers and their ordinary baggage, with the addition of the company's construction and repair materials. It was specified that a tram rail five inches wide from outside to outside should be used, the width of the tram being three inches horizontally and the height above the wagon edge to be not more than seven-eighths of an inch. This company also was required to pave between its rails, but whenever tracks were laid upon a street already paved the company was to pay the abutting property owners before the cars were operated for the paving within the rails. Cars could

not be operated until such payment had been made. Where there were to be double tracks, no greater space between them was to be permitted than was reasonably necessary "for to pass." Tracks were not to be laid within twelve feet of the curb-line, without special permission from the city council, on any street where this course could be practically avoided. In cases where the company desired to construct a line of railway in a street where tracks had already been laid by another company and where such tracks were then in use, the new company was authorized to place its tracks as near the center of the street as practicable without interfering with the practical operation of the railway already in the street. The rate of fare was fixed at five cents for any one of the company's routes from the extreme north end to the extreme south end of its track and from the extreme east end to the extreme west end. It was provided that the company's cars should be entitled to have the right of way on its tracks and any person offending against this provision of the ordinance was to be subject to a fine of not less than five or more than fifty dollars, upon conviction before the police judge of the city. It was expressly provided that the conductors should use proper diligence to prevent ladies, and children under twelve years of age, from entering or leaving the cars while in motion. Cars were to start from both ends of each of the company's lines as early as six o'clock in the morning and were to run continuously until midnight. Between six and nine o'clock in the morning and from nine o'clock in the evening till midnight, the cars were to be run at intervals of not more than ten minutes, and between nine in the morning and nine at night a headway of not more than five minutes was to be maintained.

In case the council should desire to grant any other company the right to lay tracks in a street in which this company should already have placed a line in operation, the council might require this company to move its track, if it had only one, to one side of the street so that the new track and the existing one could be arranged as a double track on either side of the center of the street. In case the company had two tracks in the street, it might be required to move them so that the new company's tracks could be placed in a position leaving an equal space between them and the

sidewalks on either side. In case, however, the new company desired to operate a line for a distance of not more than two blocks on any street occupied by this company's tracks, the council might require the new company to use the existing tracks for that distance, and in case the two companies could not agree as to compensation, then the amount of such compensation was to be submitted to a board of three arbitrators. It was stipulated that failure to use any track and run cars on it on any street or portion of a street according to the regular schedule for a period of thirty days, unless such use were unavoidably prevented, should be deemed an abandonment of the unused track and the city council might then by resolution declare such street or portion of street abandoned and require the company to remove the tracks and restore the street surface. The company was to have at least two and one-half miles of track completed and in operation within one year, and five miles within two years.

After the expiration of ten years the company was to pay annually into the city treasury five per cent of its net earnings, but nothing in this ordinance was to be construed as exempting the company's railway from taxation on the same basis as other taxable property. The company was required to furnish a bond in the sum of $10,000 to guarantee its compliance with the terms of the ordinance, and unless it filed its acceptance within thirty days after the ordinance was published, subject to all the conditions, regulations and limitations set forth, the grant was not to become operative.

This company also secured a franchise from the town of North Des Moines on much the same terms and conditions. The town franchise, however, which was granted July 6, 1886, stipulated that the rate of fare should not exceed five cents on any one route from the extreme north end to the extreme south end or from the extreme east end to the extreme west end in or out of North Des Moines and the city of Des Moines. The speed of cars in the town was limited for the first two years to a maximum of ten miles an hour, and a minimum of four miles an hour including stops. This ordinance also stipulated that snow or other matter removed from the tracks should be taken off from the street or so disposed of as not to interfere with travel. Cars were to be run

each way on a schedule of not more than fifteen minutes between six o'clock in the morning and eleven o'clock at night during the first ten years of the franchise period. Thereafter, this rule was to be subject to amendment by the council. There was also a provision that in winter, when the weather demanded it, the cars should be warmed.

The Des Moines Broad Gauge Street Railway Company secured a new ordinance December 20, 1887, authorizing it to operate its cars by electricity or other practical "motor" power. It was expressly stipulated in this ordinance, however, that "nothing in this grant contained shall be construed as an interference on the part of the Council with the exclusive right of the Des Moines Street Railway Company to construct and operate by animal power street railways upon the streets of Des Moines, under such reasonable police and equitable control as may be prescribed by the Council and in accordance with the decree of the Supreme Court of Iowa, entered December 20, 1887, in the case of said company against the city of Des Moines, the City Council having by resolution adopted December 19, 1887, determined that the lines of the Des Moines Street Railway Company, now constructed or that may be constructed or extended hereafter and operated by animal power do not furnish and will not furnish upon the streets designated in this ordinance, or to the public, such street car service as is reasonably required by said city on said streets."

By another ordinance passed July 27, 1888, the city council granted certain extensions to the Des Moines Broad Gauge Street Railway Company to be operated by electricity or some motive power other than animals or steam. By this ordinance the company was given an exclusive right upon the streets occupied by it and upon the first streets paralleling any of such streets on either side, with the exception of Grand avenue, west of Fifth street in East Des Moines, and with the further exception of the streets running east and west between East Fifth street and West Fifth street not actually in use by the company. These exclusive privileges were to continue for a period of ten years, but they were not to hold good as against any company authorized to operate cars by animal power or steam power, and the council reserved the right to authorize any other company to use

this company's tracks at not more than two points in the city and for a distance of not more than two blocks at each point. It was further stipulated by this ordinance that after the expiration of two years from its acceptance, the city should have authority to require the company to make reasonable extensions or construct and operate additional lines upon routes designated by the city council. In case any such requirements were made, the company was to notify the city within sixty days as to whether or not it would construct the proposed extensions or additional lines, and in case it refused to do so it would thereupon forfeit its exclusive right through the streets or parts of streets covered by the requirement, and the council could authorize some other company to build a railway on this route. It was stipulated, however, that this company should not be compelled to construct, equip or put in operation under these provisions more than one mile of street railroad in one year.

380. City attempts to repeal exclusive franchise; street railway abuses alleged—Des Moines.—On September 14, 1886, the council of the city of Des Moines attempted to repeal the original exclusive franchise granted to the Des Moines Street Railway Company twenty years earlier. At the same time an amended ordinance was passed giving the company authority to maintain its lines upon the streets then occupied by its tracks in actual use and upon such alleys only on which the company had depots, stables or carhouses, "and upon no other streets or alleys, unless upon application to the City Council the right to so use and occupy other streets and alleys shall be hereafter granted." The maximum rate of speed was raised to eight miles an hour, and it was stipulated that all cars should maintain an average speed of six miles per hour including stops between the termini of any line. The original ordinance had contained no schedule. By the new ordinance, however, the cars were required to start from both ends of any line as early as six o'clock in the morning and run continuously till midnight, and maintain a headway of not more than fifteen minutes between six and nine o'clock in the morning and between nine and twelve o'clock at night, and not more than eight minutes from nine o'clock in the morning to nine o'clock at night. Each car was to be provided with a driver and a conductor

unless the company placed in the car a box or receptacle in which passengers could deposit their fares.

By an ordinance passed June 1, 1888, the Des Moines city council assumed a second time to repeal the original franchise grant of September 10, 1866, and its amendments, and to substitute therefor a grant to the Des Moines Street Railroad Company as successor to the Des Moines Street Railway Company. Under the new ordinance the company was authorized to maintain and operate the street railway lines then in actual use by it except as otherwise provided in the grant. It was ordained that the city engineer should within five days after the passage of the ordinance make a survey of the tracks then owned and operated by the company, and thereupon file in the city clerk's office a duly certified map showing the streets and portions of streets actually in use by the company in the operation of its street railroad. The cars on the company's tracks were to be operated by animal power only and were not to connect with any railway on which other power was in use. But the city council reserved the right to require the company to adopt such improved and practicable motor power as public necessity or convenience might require, and also reserved the right to amend the ordinance with respect to the time and manner of the company's running its cars. The council also reserved the right to require the company thereafter to discontinue the use of any street or portion of a street not reasonably necessary in connection with the system of street car service being operated at the time this ordinance was passed, and to remove its track from such street. It was provided that if the company should desire to extend its existing lines of railway, or should desire to lay down additional and parallel tracks upon streets already occupied, it should file in the city clerk's office a written application for the privilege, specifying the streets or portions of streets which it desired to use. Thereupon the city council would investigate the matter and if it was deemed for the public good to do so, would grant the right to use such streets under the provisions of this ordinance. It was stipulated, however, that in the case of any extension, or in any case except that of a parallel track, the gauge of new tracks should be four feet eight and one-half inches. The general terms and conditions of this ordinance were substantially the same

as those of the original ordinance of 1866, as amended in 1886, except as already set forth.

The city seems to have had "all kinds of trouble" with its street railway franchises. In a resolution which appears to have been adopted by the city council on December 10, 1888, the city's grievances are set forth in detail. This resolution recites that the Des Moines Street Railroad Company had refused to recognize or accept the ordinance of September 14, 1886, repealing the original franchises of the Des Moines Street Railway Company and making a substitute grant. It also recites that the council, without admitting the invalidity of the ordinance of 1886, has examined the construction of the company's line of railway and the long continued conduct of the original company and its successor in the light of the requirements of the original ordinance with its amendments and has found that the companies "have failed, neglected and refused" to comply with the reasonable requirements of the original ordinance in many respects, some of which are set forth as follows:

"A. They have not constructed their railway upon the bridges used by them as required by section nine (9) of said ordinance.

"B. They have maintained and now maintain their tracks upon the paved streets above the surface of the same so as to greatly impede and obstruct public travel.

"C. They have maintained and now maintain their tracks upon streets not paved above the established grade so as to greatly impede and obstruct public travel.

"D. They have failed, neglected and refused to provide and use cars and carriages of the best style and class used on such railways in other cities.

"E. They have failed, neglected and refused to run their cars at the speed or times reasonably required for the public convenience and good.

"F. They have laid down tracks upon public streets without the consent of the City Council and without an intention in good faith to use the same but for the mere purpose of securing possession of such streets.

"G. They have laid down their tracks upon many streets and used the same when such occupation and use were wholly unnecessary for the reasonable operation of the railway or the accommodation of the public whereby public travel has been greatly impeded and obstructed.

"H. They have, against the express ordinance of the City and the direction of its officers, defaced and injured bridges and excavated and torn up streets and pavements in the unauthorized construction of railway tracks, to the great damage and inconvenience of the public.

"I. They have failed, neglected and refused to lay their tracks as provided in section six (6), of said ordinance of 1866.

"J. They have failed to make annual statements of net receipts and to pay taxes thereon as provided by said ordinance."

The resolution then recites that on account of the violations of the ordinance on the part of itself and its predecessors, the Des Moines Street Railroad Company has forfeited all its rights, privileges and franchises granted by the original ordinance and its amendments. However, the forfeiture resolution was to go into effect only upon the passage of an ordinance having for its object the grant to the company of the right "to use such streets as are reasonably necessary for the operation of its present system of service under such reasonable regulations as may be prescribed." Thereupon an ordinance similar in terms to that of September 14, 1886, was enacted.

381. Street railway consolidation, additional grants, litigation, and attempts to bring about a franchise settlement—Des Moines.—Resolutions were adopted by the city council of Des Moines, September 5, 1889, authorizing the consolidation of the franchises already described and certain others and the roads constructed under them. Shortly after that date, the Des Moines Street Railroad Company acquired all of the lines and commenced to operate them as a single system.

"The legal effect of this consolidation," said Corporation Counsel Baily in his report to the board of commissioners in 1909, "was to merge all the franchises granted by the City into one franchise, whose terms must be gathered from all the constituent franchises; substantially as if all the franchises had been surrendered and a new one granted embodying the terms of the constituent franchises."

In July, 1893, the property passed to the Des Moines City Railway Company. Subsequently, on February 24, 1895, an ordinance was passed authorizing this company for a period of eight years to use its tracks and cars for the purpose of carrying United States mail and express matter, the latter to be received and distributed only at stations on the company's roads, not nearer together than a quarter of a mile. Over certain of its lines the company was also authorized to carry freight, and during the period of eight years from the acceptance of this ordinance, the company was to pay to the city five per cent of its gross receipts arising from the carrying of mail, express matter and freight. The exercise of the company's new privileges was to be subject to

certain specific regulations. No freight train having more than one car drawn by a motor was to be run on West Second street except between six o'clock in the evening and six o'clock in the morning. Freight cars were not to stop at any time between street crossings and were not to stand on the public streets for any purpose. The carrying of mail or express matter was not to hinder or delay the passenger cars, and stations for the delivery of mail, express and freight were to be situated so that the stopping of the cars for the purpose of loading or unloading would not obstruct the streets or delay traffic. The charge for carrying freight within the city limits was not to exceed $3 per car for any single haul.

The franchises described in this and the three preceding sections, together with certain additional but less important grants, some of them made by town authorities for territory later annexed to the city of Des Moines, constitute the present rights of the Des Moines City Railway Company in the streets of the city. The situation is confused and litigious, but apparently ripe for a settlement that will result in the definite consolidation of the requirements of the company's franchises and the limitation of their duration, so that all will expire at one fixed time and will reserve to the city the right to take over the properties at the expiration of the new grant.

On May 24, 1909, the city council, or "commission," of Des Moines adopted a resolution reciting that there were controversies between the city and the Des Moines City Railway Company as to the company's franchises, and directing the corporation counsel to prepare and submit as a basis for negotiations for a settlement of these controversies an ordinance defining the rights and franchises of the company and the terms and conditions upon which the company should be permitted to construct, maintain and operate its system of street railways in the city, and the terms and conditions upon which interurban railway cars might be permitted to run over the company's tracks. Pursuant to the instructions contained in this resolution, the corporation counsel on July 3, 1909, submitted a report containing a brief outline of the company's history and franchises, a summary statement of the pending litigation, an exposition of the provisions of the state law affecting the powers of the city in relation to street

railways, a series of statistical tables relating to the property and finances of the company, and finally the form of a settlement ordinance modelled after the new Chicago street railway ordinances.[1] This franchise settlement has not been adopted. The city's rights are in such a tangle that it does not know just what to do about the matter.

The most striking lessons to be learned from the early street railway franchise grants of Des Moines are two, namely:

(1) Never grant a street railway franchise except for specific streets, and

(2) Never grant a franchise that is not clearly limited as to time, or else subject to revocation at the will of the franchise granting authority.

382. Franchise conditions prescribed by the general laws of Iowa now in force.—Under the general laws of Iowa, local franchise grants are now limited to twenty-five years and in all cases require ratification by a vote of the people of the city. Any city may authorize or forbid the construction of street railways within its limits and may define the motive power by which street cars shall be operated, but no railway track may be laid down in a street until after the injury to property abutting upon the street has been ascertained and compensation made to the owners in the manner provided with reference to taking private property for works of internal improvement. The law also requires that a street railway company shall be charged with the expense of paving between the rails of its tracks and one foot on either side, unless the local ordinance under which the company operates requires it to pave other portions of the street. Cities organized under the so-called "Des Moines Plan" law have authority to establish, erect, purchase, lease maintain or operate, within or without their corporate limits, water works, gas works or electric light and power plants, but no specific authority is given them to own and operate street

[1] *See* "Report of the Corporation Counsel to the City Council of the City of Des Moines and proposed Ordinance to the Des Moines City Railway Company," pursuant to resolution passed by the city council May 24, 1909. At the time of this writing, April, 1910, a proposition to establish municipal ownership of street railways in Des Moines has just failed by a close vote of the people and negotiations for a settlement with the company are still pending. Several different proposed ordinances to provide a settlement for the city's difficulties have been prepared, but the principles upon which the settlement will ultimately be made are still undetermined, so far as the author's sources of information show.

railways or telephone systems. They may, however, grant street railway franchises for a term of not more than twenty-five years, and may renew or extend such grants for a period not exceeding twenty-five years, but under this law no exclusive franchise may be granted, extended or renewed, and no franchise may be granted until notice of the application for it has been published once a week for four consecutive weeks in some newspaper of the city. There is a provision in the law to the effect that interurban railways may use the tracks of street railways with which they connect upon terms to be arranged by agreement, or if the parties cannot agree, then upon terms to be fixed by the board of railroad commissioners or by the district court upon appeal. Companies are required to pave and maintain a space seven feet wide along each of their tracks on city bridges.

383. Locations in particular streets may be revoked; exclusive franchise granted by state; transfers strictly defined; state tax on surplus dividends—Providence.—According to the federal census of 1900, the city of Providence had a population of 175,597, while the entire state of Rhode Island had a population of only 428,556. Indeed, the metropolitan district, comprising Providence and the towns immediately adjacent, had a population of 318,095, or almost three-fourths of the entire population of the state.[1] In spite of its large population, however, Providence has comparatively a weak voice in the state legislature, for the general assembly of Rhode Island is under the control of the small towns or "rotten boroughs." It is perhaps not surprising under these conditions to find that the street railway franchises of the Rhode Island metropolis have tempted the interference of the state legislature, so that what the city desires or attempts to do in relation to the street railways is comparatively unimportant. Nevertheless, the street railway companies, which from the beginning have been incorporated by special acts of the legislature, have as a rule been compelled to secure the consent of the city for the occupancy of the streets. In 1864 local franchises were granted to a number of horse railroad companies. We may take the franchise of the South Main Street Horse Railroad Company granted November 28,

[1] "Report upon a System of Public Reservations for the Metropolitan District of Providence Plantations," 1906, p. 69. The population of the city of Providence in 1910 was 224,326 and that of the entire state of Rhode Island was 542,674.

1864, as a typical one.[1] Under this ordinance the city council permitted the act of the general assembly incorporating the company to take effect within the city limits, and gave permission to the company to locate railroad tracks to be used with horse-power and passenger cars only. Under this ordinance the city retained rather complete control of the company's construction work, as shown by the following provision:

"Said company shall make and deposit in the city clerk's office an exact pattern of the rail they propose to use, an accurate survey or plan of their road, showing its proposed location, the distance of the rails from the curb-stones on each side of the street, the cross-walks of the streets and the width of the same, the entrances from the gutters to the sewers, together with a profile showing the grades of the streets; and also a written description of the manner in which they propose to construct said road, and to lay and secure their rails; and shall not be allowed to break ground or to occupy any of said streets until after they shall have obtained the written approval of the surveyor of highways and of the standing committee of the city council on railroads of their pattern of rail, their surveys, plans and manner of constructing their road, and of their method of laying and securing their rails."

The company was also required to lay suitable cross-walks at intervals of not less than 250 feet across the streets occupied by its tracks, and was to pave, repave and repair at its own expense the streets occupied by it. On unpaved streets the company was to pave between the rails and for two and a half feet on either side. The company was required to remove all obstructions, to mend and repair and pave and repave the streets whenever required to do so by the surveyor of highways acting for and under the direction of the city council committee on railroads. If the company should neglect or refuse for a period of ten days after notice to obey an order of the surveyor of highways in regard to these matters, the city council was authorized to stop the running of the cars on the streets affected. The city reserved the right, however, in all cases at its option to do the street work chargeable to the company and require the company to pay the cost of it. If the company should neglect, for ten days after demand was made upon it, to pay any such expense the city council would have the right to stop the running of the company's cars anywhere within the city, until the money was forthcoming. The city also reserved the right to permit

[1] *See* "Ordinances of the City of Providence," 1875, p. 391.

other companies to run cars over this company's tracks for such compensation and upon such terms as might be agreed upon by the companies themselves, or in case they could not agree, then for such compensation and upon such terms as the city council might prescribe. The road was to be built and put in running order within three years from the date of the ordinance. All the company's cars were to be numbered and there was to be attached to each street car horse at least one bell. The outer rails of the tracks were to be at least eight feet from the curbstone wherever possible, and the width of the cars was to be not less than six and a half feet and not more than seven feet. The city council reserved the right to annul, amend or alter, either in whole or in part, the ordinance and the terms and conditions upon which the company's right to lay rails was granted. The city council might order the rails or any part of them to be taken up and the streets through which they were laid to be restored to their original condition at the expense of the company, but at least ninety days' notice was to be given the company of the city council's intention to alter, annul or amend the terms and conditions of the franchise or of its intention to require the rails to be taken up, and the company was to have at least ninety days from the passage of the order within which to comply with its terms. The right was reserved to the company, on the other hand, to give notice at any time to the city that it would no longer use this franchise as to all or any portion of the streets affected. In any such case the tracks and fixtures were to be removed within ninety days, and the streets were to be restored to their original condition. The company was required to accept this grant.

Five companies united in 1865 to form the Union Railroad Company, which by an ordinance approved December 6, 1865, was given the right to carry freight in box cars over the tracks laid under the franchises of the constituent companies.[1] By the general laws of Rhode Island, any city or town council may pass ordinances or make contracts granting franchise rights in, over or under the public streets, and such grants may confer exclusive rights for a period not exceeding twenty-five years.[2] But wherever a street railway

[1] Ordinances of the City of Providence, *already cited*, p. 395.
[2] General Laws of Rhode Island, revision for 1909. Chapter 91. *See* Annual Report of the Railroad Commissioner for the year ending December 31, 1909, p. 184.

company is already in operation, having been duly authorized by law to use the streets, a city may not grant exclusive rights to any other company, and where more than one company is operating, no exclusive rights may be granted to one without the consent of the others. All companies receiving exclusive rights are required to pay to the city or town a special tax on gross earnings at a rate not exceeding three per cent. No company acquiring exclusive rights is authorized to increase the price of its product, wares or service over the price charged at the time such rights were acquired. The use of franchises granted under the provisions of this act is subject to reasonable regulations and orders enacted from time to time by the town or city council "controlling the extent and quality of construction and service to be maintained by the corporation to which such rights are granted, and prescribing the location and arrangement of its tracks, poles, wires, or conduits, and their appurtenances." But if the company concerned thinks any such regulation unreasonable, it may ask for a decision of the question by the superior court. This law provides that no city or town may charge a company for the use of its streets except in accordance with the terms of this act, but a company may be compelled to conform to "any existing requirements as to paving and keeping in repair" the streets and highways.

On May 3, 1892, the Rhode Island legislature granted by direct act an exclusive franchise for a period of twenty years from July 1 following, to the Union Railroad Company, to operate street railways in the city of Providence.[1] This act also gave the company the right to occupy the streets of other cities and towns, but without exclusive privileges in them. There was reserved to the city council, however, the right to impose reasonable rules and regulations from time to time as to the rate of speed, the method of operating the railroads and the manner of their construction. There was also reserved to the city council the right "at any time when the public good requires that there should be no rails in any street or highway," to compel the company on ninety days' written notice to take up and remove its tracks and other fixtures in any particular street and thereupon the city was to give the company "a right, as nearly similar in public con-

[1] "Charter and Special Laws governing the City of Providence," 1901, p. 181.

venience as possible, to construct, maintain, use and operate" its railway in another street. The right was also reserved to the city of Providence to order the removal, on one year's written notice, of the poles and wires used in connection with the company's trolley systems, whenever any other method of street car propulsion should be invented or perfected "so as to be of equal practical and commercial value as such trolley system." This act, however, was not to be construed as relieving the company from any of its existing obligations to pave and keep in repair any portion of the street, or to relieve it from paying any tax which it might then or thereafter be under legal obligation to pay to the city. The company was required to render to the treasurer of the city of Providence quarterly statements, verified on oath, of its gross earnings within the city, and was to pay to the city treasurer a special tax on such gross earnings at the rate of three per cent for the first five-year period of this grant, and at a rate of not less than three per cent nor more than five per cent thereafter during the continuance of the exclusive franchise. The actual amount to be paid within the limits mentioned during the five-year period succeeding the first, was to be fixed by agreement between the city and the company, if possible, or otherwise by arbitration. In case the arbitrators representing the two parties failed to agree upon a third arbitrator, either the city or the company was to have the right, after ten days' notice to apply to any justice of the supreme court for the appointment of the third arbitrator. In case the company should neglect to pay this tax quarterly, the city treasurer would have authority to collect from the company double the amount of the special tax due. Inasmuch as the Union Railroad Company had an extensive system of street railways ramifying from Providence as a center, the provision of this ordinance relating to the method of distributing gross earnings according to towns and cities, is of particular interest. The gross earnings chargeable to the city of Providence were to be that proportion of the company's entire gross earnings which the length of the company's tracks in the streets of the city bore to the total length of the company's tracks in all the cities and towns in which it operated. Inasmuch as the earnings per mile of track on any combined city and suburban street railway system, are very much greater

for the city tracks than for the suburban tracks, it can readily be seen that this method of apportioning gross earnings of the Union Railroad Company would operate to the disadvantage of the city of Providence.

This franchise act not only recognized the principle of monopoly in street railway operation, but also recognized the obligation which the possession of a monopoly in a public service implies. It was provided that whenever in the opinion of the city council the public good required the construction of additional street railway lines, it might at any time during the twenty years of the exclusive franchise period, order the company to construct, equip and put in operation such line or lines within one year from the date of the order. The penalty for the company's refusal to obey any such extension order, was to be the loss of its exclusive privileges. Another logical obligation of monopoly which the company was to fulfill under the terms of this franchise, was the transportation by its own power of the passengers and cars of any other street railroad line delivered to this company at the terminus of its lines at or outside of the city limits. It was stipulated, moreover, that the company during the continuance of its exclusive privileges should not charge any greater rates of fare within the city limits than the rates actually charged at the time of the passage of this act. It was expressly provided that "all acts and parts of acts, and all rules and regulations, terms, conditions, and ordinances, of any town council or City Council, and all acceptances thereof and assents thereto of said railroad company, or of any companies consolidated into or with it, inconsistent herewith, are hereby repealed and annulled." On certain streets in the city of Providence, the cable system is still in use. In 1893, the year subsequent to the granting of the twenty-year exclusive franchise to the Union Railroad Company, the Providence Cable Tramway Company, a subsidiary of the Union, was given similar exclusive rights so far as those particular streets were concerned, and was required to pay the same percentages of gross receipts as had been required of the Union Railroad Company.

Subsequent to the expiration of the first five-year period of this franchise, the company, after the machinery of arbitration had been set in motion, but before a decision had been

reached, consented to pay the maximum gross earnings tax authorized under its franchise just described, namely, five per cent.

By an act of the general assembly of Rhode Island passed May 7, 1896, the Union Railroad Company was required to establish in the city of Providence a general system of free transfers with a central transfer station and other minor stations at points to be agreed upon between the company and the city.[1] The location of the central station was to be furnished by the city of Providence. Upon the completion of this station and thereafter until the expiration of the company's exclusive rights, July 1, 1912, the company was to run cars at frequent intervals, of not more than twenty minutes in any case between six o'clock in the morning and twelve o'clock at night, over all routes not extending beyond the city limits as they were at the time this act was passed. Free transfers from one line to another were to be given within this central station. Under this act the company was to be relieved for a period of five years after it had established the system of free transfers from all obligations to pave or repave any portion of the streets of the city, except in connection with the relaying or repair of its tracks. The free transfer system was to be established within six months after the city furnished a location for the central transfer station. Owing to differences between the city and the company, no general system of transfers was put into operation until several years after the passage of this act.[2]

As if the grant of an exclusive franchise in the city of Providence until 1912 were insufficient evidence of loyalty to the street railway companies, the general assembly of Rhode Island passed an act in 1898 under which the Union Railroad Company claims not only exclusive, but perpetual rights.[3] Under this act any company accepting it, was to pay a state tax on earnings. Unless the company paid an annual dividend of more than eight per cent on its actually outstanding capital stock, this tax was to be one per cent of its gross earnings. If, however, a company paid more than eight per cent

[1] Chapter 373. *See* "Charter and Special Laws," *already cited*, p. 198.
[2] "Public Utilities of Providence," by Sidney A. Sherman, Ph. D., p. 8.
[3] "An Act providing for a Tax on Street Railways," now Chapter 216 of the general laws of Rhode Island, revision of 1909. *See* "Charter and Special Laws," *already cited*, p. 197; also Annual Report of the Railroad Commissioner for 1909, *already cited*, p. 121.

dividends, the tax was to be equal to the excess of dividends paid over and above eight per cent, but in no case to be less than one per cent of the gross earnings. This act stipulated that any street railway company accepting these provisions should "have and enjoy, with respect to all lines leased, owned, or operated by it during the continuance of such payments, and in consideration thereof, all the rights, privileges, and franchises which it has at the time of such acceptance or which may thereafter be granted to it." It scarcely need be said that the Union Railroad Company, having accepted this act, is careful not to pay more than eight per cent dividends. As a matter of fact, the company's entire system, together with two other street railway systems, has been leased for operation by the Rhode Island Company, which is in turn a subsidiary of the New York, New Haven and Hartford Railroad Company. The Rhode Island Company during the year ending June 30, 1909, paid dividends amounting to five per cent on an outstanding capital stock of $8,510,400 par value.[1]

By a general law of Rhode Island, it is declared that a day's work for conductors, gripmen and motormen employed in the operation of street railways, whatever the motive power, shall not exceed ten hours' work to be performed within twelve consecutive hours.[2] There is a provision, however, to the effect that on legal holidays and in unexpected contingencies, extra labor may be performed for extra compensation. Moreover, the purpose of the act is declared to be the limitation of the usual hours of street railway employees in the absence of agreement as to hours between the employees and their employer, but nothing in the law is to prevent an employee twenty-one years old, or upwards, from working a greater or a less number of hours per day under contract. It is obvious from the terms of this act that a company by reducing wages could virtually compel an employee to enter into "voluntary" contract to work more than ten hours a day.

The general transfer law now in force in Rhode Island is of particular interest because it is unusually specific.[3] This law requires any company operating street railways to

[1] Annual Report, etc., *already cited*, p. 79.
[2] Chapter 218, General Laws of Rhode Island, revision of 1909. *See* Annual Report of Railroad Commissioner, *already cited*, p. 132.
[3] Chapter 217, General Laws of Rhode Island, revision of 1909.

provide a system of free transfers by means of which a passenger paying the regular fare of five cents will be able to ride from the point where he enters the company's car to any other point in the same city or town reached by a second car operated by the same company upon a track which physically intersects or connects with the track upon which passage was first taken. This system of free transfers is subject, however, to the following limitations:

(1). No passenger is entitled to a transfer unless he demands it at the time of paying a cash fare.

(2). A passenger with a transfer must take passage on the first car passing the point of intersection or connection of the two lines after he arrives there which is being operated in the direction he desires to go.

(3). No transfer can be required that would enable the passenger to return towards the point where he first took passage by a line running parallel with the one from which he is transferred, or in substantially the same direction.

(4). No person is entitled to a transfer when he can reach his point of destination from the point where he first took passage without such transfer upon the payment of a single fare of five cents.

(5). No person may receive a transfer on any car until he has paid the full fare lawfully established between the point where he enters the car and the point of intersection or connection at which he expects to transfer; and no person is entitled to ride further on the second car on a transfer than he would be entitled to ride upon the payment of a five cent fare.

(6). Transfer tickets are not assignable or transferable.

(7). The company may not be required to issue more than one transfer ticket for a five cent fare; that is to say, a transfer on a transfer is not required.

(8). The company may designate on the transfer ticket the routes on which and the direction in which the ticket will be received and the point of intersection or connection at which and the time within which it must be presented. The company may also make such other reasonable rules and regulations as may be required to prevent fraud in the issue or use of transfer tickets.

384. Exclusive franchise for fifty years; extensions required from time to time by the city—Minneapolis.—By an ordinance approved July 17, 1875, and confirmed by the Minnesota legislature four years later, the city of Minneapolis granted to the Minneapolis Street Railway Company during the term of its charter, which was for fifty years from 1873, "the exclusive right and privilege of constructing and repairing (*operating*) a single or double track for a passenger railway line, with all necessary tracks for turnouts, side tracks and switches, in such streets of said city, as the City

Council may deem suited to street railways."[1] The city council reserved the right, however, in its discretion, to limit the company to the construction of a single track upon any street or streets. The grant was made on the express condition that a certain specified line of railway should be constructed and put in operation within four months and certain other lines within one year thereafter. The council reserved the right to designate additional lines of railway, or extensions of existing lines "demanded by the public necessities." If the company upon being notified of any such designation should fail to construct the new line or the extension within a reasonable time fixed by the city council, the company would thereby lose its exclusive right to construct and operate street railways in the particular streets designated. It was also stipulated that if the company at any time neglected to keep in operation any line which it had constructed, then upon reasonable notice, it should forfeit its exclusive right as pertaining to such neglected line, and the city council would have the right to require the company to remove its tracks and other fixtures from the abandoned line, within ten days from the service of notice. One might suspect that the possibility of having undesirable extensions thrown open to competition would not constitute a very strong leverage in the hands of the city for forcing the company to extend its tracks as required. There was, however, another clause in the ordinance to the effect that if another company should be let in to build lines which the Minneapolis Street Railway Company refused to construct, then the two companies should allow each other "to connect with and jointly use such portions of the track belonging to each as the convenience of the traveling public may require, upon such equitable terms as may be agreed upon by the said companies or may be determined upon by the District Court of Hennepin County."

The company's cars were to be propelled either by animal or by pneumatic power as the company might deem advisable, but it was stipulated that no propelling power or machinery of any sort should be used after it had proved to be a public nuisance. No locomotive or freight or passenger car of the type usually run over the general railways of the state, was

[1] "Minneapolis City Charter and Ordinances," 1872 to 1905, p. 564.

to be used on any of the company's tracks unless authorized by the council. The company was required to adjust its tracks to public street improvements and changes of grade at its own expense and was to pave or otherwise improve the space between its rails except in case pneumatic power should be used. In that case it could be required to pay "only so much of the expenses of paving the street as is made extra by reason of said railway." The company was authorized to regulate and establish once every five years, the rates to be charged for the transportation of passengers and freight, but the rates so fixed were to be such as the city council might deem just and reasonable. The city was expressly forbidden, however, to reduce the passenger fare below five cents over any one continuous line, and the council had no authority to designate any such continuous line to be more than three miles in length. The company was required to furnish and operate a sufficient number of cars to accommodate the travelling public on all streets occupied for railroad purposes. It was stipulated, also, that the company should make "such equitable and mutual terms (as the Councils of St. Paul and Minneapolis may determine), with the street railway company of St. Paul, or such other company as may have the right to operate the street railway in St. Paul, as shall allow each of said two companies to run their cars into the business centers of each of said cities over the tracks of each other, without change of cars between the two cities." There was included in this ordinance a set of regulations which seems to have been adapted from the standard form of regulations for horse railways in effect in other western cities in the early days. Within thirty days after the publication of this ordinance, the company was required to file a written acceptance of it, and it was stipulated that "this ordinance shall operate as a contract between the city and said company." In case, however, the ordinance was not accepted, the franchise would remain inoperative.

In 1889 when a certain extension was granted, the obligation of paying an annual license fee of twenty-five dollars per car for the average number of cars operated, was imposed upon the company.[1]

[1] Ordinance approved October 3, 1889, "Minneapolis City Charter and Ordinances," *already cited*, p. 596.

In 1890 the company acquired from the city council authority to reconstruct its lines for the purpose of operating them by electricity.[1] Under this ordinance the company was required to equip its railway with cars "constructed and maintained with all of the latest improvements for the comfort and convenience of passengers." Instead of putting a maximum limitation upon the speed of the cars, the ordinance required that their rate of speed should not be less than an average of eight miles an hour. Not more than two cars could be attached together without special permission of the city council. It was stipulated that "in case any other electric system preferable to the overhead wire system shall prove a practical success, the City Council shall have the right to designate any existing line operated by said street railway company as a line on which to experiment with said new electric motive system." If after the new motive power had been in use for six months the council "deems it a practical and superior power to the overhead wire system," it had the right to order the entire existing street railway system or any of its lines to be operated with such new electric motive power. It was ordained by this ordinance that passenger cars should run "between extreme limits on extensions to or near the intersection of Hennepin and Nicollet avenues, without change to passengers travelling thereon." Any passenger paying a cash fare was to be entitled to one transfer, which could not be transferred to another person, and which had to be used on the next car departing on the connecting or intersecting line.

By an ordinance passed over the mayor's veto July 14, 1899, the company was given the right to operate through interurban cars from the central business portion of Minneapolis to the eastern city limits.[2] These through cars were to be conspicuously painted and labeled. The rate of fare on the through cars from any point in Minneapolis to any point in St. Paul was fixed at fifteen cents for the period of three years. The company was required, however, to continue the operation of local interurban cars at intervals of not exceeding ten minutes. Such cars were to make the trip between the terminus in Minneapolis and the terminus in St. Paul within a period of one hour.

[1] Ordinance approved September 22, 1890, "Minneapolis City Charter and Ordinances," *already cited*, p. 578.
[2] "Minneapolis City Charter and Ordinances," *already cited*, p. 589.

A very large number of extensions have been constructed by the Minneapolis Street Railway Company either upon petition of the company or in response to the orders of the city council. An examination of the summary of resolutions, motions and reports of committees of the Minneapolis city council from 1875 to June 1, 1905, relating to street railway companies, shows that out of a total of sixty-nine extensions provided for, twenty-four were "authorized," and forty-five were "ordered," "required," "directed" or "authorized and directed."[1] In 1907 the city passed an ordinance requiring the company to sell six tickets for twenty-five cents, but the enforcement of this ordinance was enjoined on the ground that it was a violation of the city's original contract with the company. The matter was taken to the United States Supreme Court and the injunction was finally sustained.[2]

385. A franchise for all streets; original right of purchase surrendered; conflict over extensions—St. Paul.—By an ordinance approved January 8, 1872, the city of St. Paul granted to certain individuals, their associates, and successors, authority to lay a line of railway with single or double track "in any or all of the streets" in the city with the exception of one.[3] No double track, however, was to be placed in any street less than sixty feet in width. This grant carried with it the right to operate horse passenger railway cars and carriages. The common council reserved the right to regulate the speed of the cars so far as to "conform to the speed generally permitted for similar cars in other cities." The rate of fare for any distance within the city on any line of the railway was to be not more than seven cents for each passenger, including his ordinary baggage, except in the case of cars chartered for specific purposes. An annual license fee of $10 for each car was to be paid before the car was put in use. It was provided that if after three years from the construction of any of the lines of railway it should be found that the net earnings of such lines were "sufficient to pay above ten per cent on the cost of constructing, equipping and maintaining" them, the council should have authority to reduce the fare on such lines, but not below the sum of five cents. This franchise was granted for the term of ten years, but was to continue there-

[1] Minneapolis City Charter and Ordinances, *already cited*, pp. 994 to 1012.
[2] 215 U. S. 417, decided January 3, 1910.
[3] Ordinances of the City of St. Paul, 1907, p. 817,

after until the city should purchase the "railway and all the stock and property pertaining thereto and used in connection therewith." The city reserved the right at any time after the expiration of the ten-year period "to purchase said railways, depots, depot grounds, station grounds, station houses, carriages, cars, horses, animals, harnesses, equipage, furniture and improvements of every kind, name and description used in the construction or operation of said railways or appurtenances, together with all the corporate rights or franchises that may be acquired by such parties, their successors or assigns." The price to be paid for the property was to be fixed by arbitration. For this purpose three commissioners might be appointed by the common council and three by the grantees. These six commissioners would then proceed to appraise the property at its fair cash value, but if they could not agree, they, or a majority of them, were to appoint one suitable disinterested person to appraise such portions of the property as the commissioners could not agree upon. Within six months after the approval of the report of the appraisers by the common council, the city was to pay for the property and thereupon become its owner. There was a provision in this franchise to the effect that each of these street railway lines might have a separate and distinct organization, but in such case the tickets issued by one organization or line were to be received in payment of fare by any and all of the others. The grantees were required to keep that portion of the street surface between the rails of each track and for a space of two feet on either side clean and in good repair and to remove the snow from such portion of the street "so as to afford a safe and unobstructed passage to sleighs and wagons."

When the ten-year period was up, in 1882, the St. Paul City Railway Company, which had acquired the franchise granted to individuals in 1872, desired the city either to purchase the property or to relinquish the right to make such purchase, and held out the promise that if the city would relinquish its right, the company would make extensive and costly improvements. The company professed to require "increased facilities of raising money upon the security of said railways, property, rights and franchises."[1] Accord-

[1] Ordinances, *already cited*. p. 888.

ingly, an ordinance was passed February 8, 1882, declaring that the city's right to purchase as reserved in the original franchise "is hereby waived and forever relinquished," and confirming to the company all the rights and privileges granted by the original ordinance or by a certain act of the legislature ratifying the ordinance, during the term of the company's charter, "free and clear of such right of said city to purchase." [1]

By another ordinance approved September 20, 1889, the company was authorized to build, maintain and operate a street railway on sixteen different lines.[2] These lines of railway were to be operated "by cable, electric, pneumatic or gas power, at the option of said company." There was a proviso, however, to the effect that steam should not be used as a motive power and that no power should be employed which would be a public or private nuisance or which would constitute an additional servitude to the property on the streets. In the operation of its plants, the company was not to burn or use bituminous coal without permission from the common council. The size, location and material of poles were to be designated by the city engineer. The cars used were to be "of the best modern style and construction, suitable for the safety, convenience and comfort of the passengers." They were to be comfortably heated during the winter months and whenever necessary at any season, and were to be properly lighted and ventilated. No track was to be put into operation before it had been inspected and approved by the common council. The company's obligations as to snow removal were more specifically defined. It was required to remove the snow from in and about its tracks so as to afford a safe and unobstructed passageway for vehicles within twenty-four hours after the snowfall in each instance. The repairs of the street surface and the removal of the snow were to be done to the satisfaction of the city. The rate of fare was fixed at five cents per passenger, and children under five years of age travelling under the care of an older person were to be carried free. The company was required to issue transfer checks after November 1, 1890, to passengers paying fare, but no passenger was to be entitled

[1] The company claims a perpetual charter, originally granted by the territorial legislature in 1859 and amended by the state legislature in 1868 and 1872.

[2] Ordinance No. 1227, Ordinances, *already cited*, p. 855.

to more than one transfer for one fare, and the transfer had to be used on the next car departing on the connecting line. The company by the acceptance of this ordinance surrendered all rights to lay car tracks on certain exempted streets. It was provided, however, that the company's waiver of its rights should continue in force only so long as the city should not grant to any other persons or company the right to use such exempted streets for railway purposes either upon the surface or above or below the surface. The company agreed to pay the city annually a sum of money equivalent to the difference between the amount of its general taxes and three per cent of its gross earnings. The common council reserved "the right at any time, and from time to time, after January 1, 1892, to order the construction and completion by said Saint Paul City Railway Company of any new railway upon any and all streets in the City of St. Paul, upon which sewers shall have been constructed." All new lines or extensions ordered by the council were to be constructed and put in operation within one year after the date of the order. In case the company failed to comply with the provisions of the ordinance, or to complete the designated lines of railway within the time specified, all the rights and privileges granted by this franchise were to be forfeited. Before the commencement of the construction of its lines, the company was required to execute a bond in the sum of $100,000 to indemnify the city against claims growing out of the exercise of the franchise. If the company desired to accept this ordinance it was to file with the city clerk within thirty days after the publication of the ordinance, its written acceptance, and was to deliver to the city comptroller a bond in the sum of $200,000 to guarantee that it would complete the construction of all the railway lines enumerated and have them equipped and in operation within the time specified, or in lieu thereof forfeit to the city the sum of $100,000 as liquidated damages. The rights and privileges granted by this ordinance were for a term of fifty years. It was stipulated, however, that nothing in this ordinance should have the effect of taking away or abridging any of the company's franchises and privileges granted to it by any other ordinance or authority, "whether as respects the rights to construct and maintain any railway or operate the same, or the

power to be used in operating the same, or otherwise as may be prescribed by such other ordinance or authority" except as to the streets exempted by this ordinance.

In 1893 the ordinance just described was amended so as to restrain the common council from ordering the construction of any extensions or the construction of any horse car lines between May 1, 1893, and September 1, 1895.[1]

By an ordinance approved February 18, 1903, the common council declared that in its opinion "the service as now rendered on the different lines in the city of St. Paul is not by means of such cars, suitable for the safety, convenience and comfort of the passengers."[2] Accordingly, the company was directed to operate "owl cars" on all its lines within the city between midnight and five o'clock every day, at least one car per hour on each line.

The city from time to time exercised its right reserved under the ordinance of 1889 to order extensions. It appears, however, that the company claimed the right under its original franchise to build extensions wherever and whenever it pleased. Litigation ensued which was decided by the United States district court in favor of the company. A resolution of the common council was approved March 2, 1905, "determining rights as between the city of St. Paul and the railway company."[3] This resolution recited that in consideration of the company's agreeing to abide by the stipulations set forth in the resolution, the city would not take an appeal from the decree of the lower court. One of the conditions of the settlement was that the company should proceed to make certain specified improvements and extensions of its lines within a fixed period. It was also provided that the company "without in any manner modifying the terms and conditions of its franchise rights with reference to rates of fare, and without obligating itself so to do, expresses its entire willingness" to charge only a five-cent fare for people going to or from Minneapolis west of a certain street. The company also agreed that it would within eighteen months erect and thereafter maintain its "manufacturing plant" at a certain point in the city. The company

[1] Ordinance No. 1686, approved May 18, 1893; "Ordinances of the City of St. Paul," *already cited*, p. 882.
[2] *Ibid.*, p. 915.
[3] *Ibid.*, p. 932.

agreed that in the future when it desired to build any new or additional lines on streets not then occupied by it and not exempted by the terms of existing ordinances, it would file with the city clerk a written notice enumerating the streets upon which it desired to construct and operate such new lines, and in case the city should at any time within forty days from the filing of such notice pass a resolution in good faith declaring that the streets mentioned in the notice or any of them were not desirable or suitable for street railway purposes, then the company would not occupy such streets until the repeal or modification of the resolution. It was provided, however, that this condition requiring the giving of notice to the city should continue for such time only as the city should not grant to any other person or company the right to use such streets for street railways. It was also agreed that this provision should not take away any of the rights or authority of the company under existing ordinances, but only that the company promised not to exercise its rights except in the manner described. It was also provided that the conditions relating to the filing of notice of intended construction and extensions should not apply to the extension of any existing line. This was defined as meaning that any existing line might be further extended along any street running in the same general direction without notice being given to the city.

The company also agreed as a concession in this settlement to make payments which in addition to taxes would amount to six per cent of its gross receipts instead of three per cent as was required under the preceding agreement. Furthermore, the company agreed to pay into the city treasury not later than July 1, 1905, the sum of $30,000 in cash which was to be expended either for the construction of a new pavilion in Como Park or for the widening of a specified street. In case the company failed to carry out any of the terms and stipulations of this settlement, the city reserved the right at any time within the next three years to apply to the court and have the decree already referred to set aside so that the city's right of appeal to the higher courts would be revived.

The St. Paul City Railway Company claims a perpetual and exclusive franchise under the ordinances of 1872 and

1882 for horse car operation. Under the ordinance of 1889, it has a fifty-year franchise for electrical operation. Unless the company is given an extension or enlargement of its powers in the meantime, the citizens of St. Paul may expect to have to ride on horse cars again after 1939!

386. A general street railway, light, heat and power franchise, practically exclusive for three years; tax on net earnings; regulation of rates by city—Topeka.—By an ordinance in effect June, 9, 1903, the Topeka Railway Company was authorized "to equip and re-equip, construct and reconstruct, and maintain and operate, such portions of its present lines of street railway within the city of Topeka, and such new lines, as said company shall deem necessary for the creation of a new system of railway in said city, and to construct, maintain and operate, in, over, on and through any of the streets, alleys, avenues, bridges, viaducts and other public highways exceeding twenty feet in width within said city, its line or lines of single or double track electric railway, with necessary curbs, switches, turnouts and connections, and any pipes, conduits, poles, wires, cables or other means and appliances by which to propel its cars on said track or tracks and by which to furnish in connection therewith, heat, light and power."[1] The company was limited, however, on a certain viaduct to a single track, and was not authorized to lay any tracks at all over a certain bridge over the Kansas river or on any one of a short list of exempted streets. The franchise was expressly non-exclusive. It was given for a period of thirty years, but it was provided that the company's right to build any new lines must be exercised within the first three years after the passage of the ordinance; for at the end of that time the company would lose its right to use any additional streets without receiving anew the consent of the mayor and council. This franchise included the right to build and maintain for a period of thirty years a single or double track street railway bridge across the Kansas river. This bridge was to be constructed under the supervision of the city engineer according to plans and specifications prepared by the company and approved by the city authorities.

During the process of construction not more than five

[1] Compiled and Revised General Ordinances, City of Topeka, 1905, p. 239.

blocks on any one street were to be disturbed at any one time by the company's excavations. The company was to lay its tracks on the surface of ungraded streets, subject to the right of the city to establish the grade at any time and require the tracks to be replaced at the company's expense according to grade. It was provided, however, that when the company had once built its tracks to the established grade, "any further expense due to the raising or lowering of such first established grade shall be borne and paid for by said city." Where the tracks were to be constructed in a street previously paved, the company, having taken up the pavement on its right of way, would then have the option either of paying the city the value of the material so taken up and of using such material in repaving, or of allowing the city to remove the paving material, and in that case of furnishing its own materials for repaving. The value of the materials taken up and used again by the company was to be ascertained by arbitration. Whenever the city repaved a street occupied by the company, the latter was to repave in and about its tracks, if the material on its right of way was of the same age and in the same condition of decay as the pavements in other parts of the street. In case any street should be abandoned by the company, all of the tracks and other street railway appliances were to be removed, and the portion of the street disturbed was to be placed in as good condition as the remainder of the street at the company's expense.

Policemen and firemen in uniform and children under five years of age accompanied by parents were to be carried free. Other persons were to pay a fare not exceeding five cents, except between midnight and five o'clock in the morning, when the fare was to be ten cents. The franchise required that free transfers be given, good for use for ten minutes from the time of their issuance or until the arrival of the first connecting car. The company's principal offices, shops and car-barns were to be built and maintained within the city. The city was authorized to carry the hand baggage belonging to passengers and also "to carry and deliver packages of any kind or description, of fifty pounds weight or less, including express packages." Coal and other freight might be transported by the company over its lines between

1882 for horse car operation. Under the ordinance of 1889, it has a fifty-year franchise for electrical operation. Unless the company is given an extension or enlargement of its powers in the meantime, the citizens of St. Paul may expect to have to ride on horse cars again after 1939!

386. A general street railway, light, heat and power franchise, practically exclusive for three years; tax on net earnings; regulation of rates by city—Topeka.—By an ordinance in effect June, 9, 1903, the Topeka Railway Company was authorized "to equip and re-equip, construct and reconstruct, and maintain and operate, such portions of its present lines of street railway within the city of Topeka, and such new lines, as said company shall deem necessary for the creation of a new system of railway in said city, and to construct, maintain and operate, in, over, on and through any of the streets, alleys, avenues, bridges, viaducts and other public highways exceeding twenty feet in width within said city, its line or lines of single or double track electric railway, with necessary curbs, switches, turnouts and connections, and any pipes, conduits, poles, wires, cables or other means and appliances by which to propel its cars on said track or tracks and by which to furnish in connection therewith, heat, light and power."[1] The company was limited, however, on a certain viaduct to a single track, and was not authorized to lay any tracks at all over a certain bridge over the Kansas river or on any one of a short list of exempted streets. The franchise was expressly non-exclusive. It was given for a period of thirty years, but it was provided that the company's right to build any new lines must be exercised within the first three years after the passage of the ordinance; for at the end of that time the company would lose its right to use any additional streets without receiving anew the consent of the mayor and council. This franchise included the right to build and maintain for a period of thirty years a single or double track street railway bridge across the Kansas river. This bridge was to be constructed under the supervision of the city engineer according to plans and specifications prepared by the company and approved by the city authorities.

During the process of construction not more than five

[1] Compiled and Revised General Ordinances, City of Topeka, 1905, p. 239.

blocks on any one street were to be disturbed at any one time by the company's excavations. The company was to lay its tracks on the surface of ungraded streets, subject to the right of the city to establish the grade at any time and require the tracks to be replaced at the company's expense according to grade. It was provided, however, that when the company had once built its tracks to the established grade, "any further expense due to the raising or lowering of such first established grade shall be borne and paid for by said city." Where the tracks were to be constructed in a street previously paved, the company, having taken up the pavement on its right of way, would then have the option either of paying the city the value of the material so taken up and of using such material in repaving, or of allowing the city to remove the paving material, and in that case of furnishing its own materials for repaving. The value of the materials taken up and used again by the company was to be ascertained by arbitration. Whenever the city repaved a street occupied by the company, the latter was to repave in and about its tracks, if the material on its right of way was of the same age and in the same condition of decay as the pavements in other parts of the street. In case any street should be abandoned by the company, all of the tracks and other street railway appliances were to be removed, and the portion of the street disturbed was to be placed in as good condition as the remainder of the street at the company's expense.

Policemen and firemen in uniform and children under five years of age accompanied by parents were to be carried free. Other persons were to pay a fare not exceeding five cents, except between midnight and five o'clock in the morning, when the fare was to be ten cents. The franchise required that free transfers be given, good for use for ten minutes from the time of their issuance or until the arrival of the first connecting car. The company's principal offices, shops and car-barns were to be built and maintained within the city. The city was authorized to carry the hand baggage belonging to passengers and also "to carry and deliver packages of any kind or description, of fifty pounds weight or less, including express packages." Coal and other freight might be transported by the company over its lines between

midnight and five o'clock in the morning at a speed of not more than eight miles an hour.

For failure, neglect or refusal to comply with any of the provisions of the ordinance, the company's franchise might be forfeited by the city, but before forfeiture the city was required to serve a written notice upon the company, or upon the trustee or trustees in any trust deed recorded in Shawnee County securing the company's bonds. After receiving such notice, the company was to have ninety days in which to comply with the provisions of the franchise. Thereafter the city might declare the franchise forfeited, but the company was to be given the benefit of any delays caused by riot, strikes, or injunctions or other *bona fide* legal proceedings. The company agreed to spend within three years the sum of $400,000 in rebuilding, rearranging, extending and re-equiping its system, under penalty of the forfeiture of a bond for $20,000. The company was required to permit the cars of any interurban electric railway to use its tracks from a connecting point within the city to any designated terminal within the city.

Under the express requirement of the public utilities article of the city charter, the right was reserved to the council to require the company to make a report once every six months. It was also made obligatory upon the company to pay into the city treasury ten per cent of its annual net earnings over and above ten per cent earned on its investment. It was also provided that the city might at all times during the continuance of this grant fix a reasonable schedule of maximum rates, on condition that it should at no time fix a rate which would prohibit the company from earning at least ten per cent on its capital invested in the city, over and above its reasonable operating expenses and the expense for maintenance and taxes. At the end of the thirty-year period, the city would have the right to take over the property by filing a petition in the district court and securing an appraisal by three disinterested commissioners, non-residents of the city. One of these commissioners, who was to be an expert street railway engineer, was to be appointed by the court. The two others were to be named by the city and the company respectively.[1]

[1] Compiled and Revised General Ordinances, *already cited*, pp. 49–52.

387. All streets covered; twenty-four tickets for one dollar; shade trees to be protected; bell to be rung at street crossings; city to bear expense of removing tracts—Wichita.—The street railway franchise granted by the city of Wichita December 23, 1899, and amended April 29, 1903, was in many respects similar to the Topeka franchise described in the preceding section.[1] Like the Topeka grant, this franchise covered all the streets of the city, with certain specific exceptions. It did not, however, include the right to furnish light, heat and power, and instead of giving the grantees three years within which to select the streets to be covered by the new system of railways, the Wichita ordinance prescribed a minimum amount of construction on certain specified lines. The grantees were required to purchase the railway system owned at the time by the Wichita Electric Railway and Light Company and to repair and rebuild it. The new street railway system was to be equipped with not less than twelve new vestibule cars with a seating capacity of not less than twenty-eight persons each. All such cars were to be kept in good repair, properly painted and heated comfortably in cold weather. Any difference arising between the grantees and the city engineer in relation to the construction of the road was to be brought before the city council and finally adjusted by that body. Not only was the company required to keep its repair shops and business office within the city limits, but also all of its rolling stock. The city reserved the right to take up the tracks and remove the rails when necessary to effect any public improvement, but such work, as well as the relaying of tracks and the replacing of the roadbed, was to be done at the city's expense, and without any unnecessary delay. In order to prevent the destruction and mutilation of shade trees the grantees were prohibited from cutting or trimming trees except under the direction of the city engineer or some other duly authorized representative of the city council.

Whenever the city council thought that the public necessity required the construction of an additional line of street railway, it was to give written notice to the grantees under this ordinance, and if they failed to construct and operate

[1] Book of Ordinances of the City of Wichita, 1908, pp. 612, 619.

the new extension within six months thereafter, they were to forfeit their right of way on the streets specified in such notice. They could not be required, however, to construct and operate more than three miles of new railway within any one year after receiving notice. Cars were to be operated not less than sixteen hours a day beginning at 6:30 in the morning. Cars running after sunset were to be provided with headlights and signal lights at each end. A bell was to be attached at all times to each car, and was to be rung to warn the people of the car's approach to each street crossing. The rate of speed was limited to three miles an hour in turning corners, eight miles generally within the business district and twenty miles in the suburban districts. Like the Topeka franchise, this ordinance was granted for a period of thirty years and was subject to similar conditions of forfeiture. This franchise, however, contained a clause to the effect that the grantees within thirty days after the city had a population of 40,000 as shown by the United States census, should file with the city clerk a detailed statement of the cost of their system of street railways, and thereafter should file annual detailed statements of operating expenses and the earnings of the railway. The company was also required to put on sale at its office books of twenty-four tickets to be sold at one dollar a book. These tickets could be used in place of cash fares and also carried with them the right of free transfers.

388. An exclusive franchise repealed by implication—Wilmington, Del.—The Wilmington City Railway was incorporated February 4, 1864, by a special act of the Delaware legislature.[1] Under this act the amount of the company's capital stock was fixed at $100,000, and the company was authorized "to borrow money to such an amount that its indebtedness secured by bond and mortgage shall not at any time exceed one-half of the amount of its capital stock for the time being." The fundamental purposes and powers of the corporation were described in the following words:

"It shall be the business of the said corporation to locate, construct, operate and maintain a city railway for the carriage of passengers and freight for compensation within the city of Wilmington, with the

[1] 12 *Delaware Laws*, Chapter 406.

privilege also of extending such railway to any place or places outside of the city, not more than six miles distant from the city limits. The said corporation shall have the exclusive right and privilege of locating, constructing, operating and maintaining a city railway within the city limits."

The company was authorized to construct either a single or a double track and to change its road from one to the other at any time. The gauge of the tracks was to be five feet two inches. The railway was to "be conformed as near as may be to the grades which now are or hereafter may be established." The company was to keep the pavements in good repair within the rails of its tracks and for three feet on either side, and was not to interfere with proper and free access to culverts, water mains and gas pipes. Steam power could not be used on this railway except with the consent of the city council. It was stipulated that "in order to prevent accidents, suitable bells shall be attached to the horses drawing the cars." It was also provided that "the said corporation shall at any time have full power to locate, alter and extend its tracks from said city to any place or places outside of the city, not more than six miles distant from the city limits." Any person doing wilful damage to the company's railway, or hindering its construction or operation, would be liable to the company in a civil action for double the damages sustained and would be guilty of a misdemeanor, punishable by a fine of not more than $300. The act specifically provided that "this charter shall be perpetual, subject nevertheless to be revoked by the Legislature at any time for the misuse or abuse by the Company of the privileges herein granted." A specific route was described in this act which the company was obligated to "fully construct" by July 1, 1865, subject to the penalty that "otherwise this act and all the rights, privileges and franchises hereby granted, shall on the day last aforesaid wholly cease and determine."

By an act passed May 1, 1895, amending the charter of the Wilmington and Brandywine Springs Railway Company, the Delaware legislature granted to this new company the right to enter the city of Wilmington along certain specified streets, upon securing the consents of the local authorities.[1] Thereafter the Wilmington City Railway Company brought

[1] 20 *Delaware Laws*, Chapter 89.

an action to prevent the new company from entering the city, primarily on the ground that its own charter and franchise granted in 1864 was exclusive. The chancellor, however, in deciding the case in 1900, held that the legislature by granting the privilege of entering the city of Wilmington to a new company had by implication repealed the exclusive feature of the old company's franchise.[1] The court found authority for this repeal in the section of the old Delaware constitution which provided that "no act of incorporation except for the renewal of existing corporations, shall be hereafter enacted without the concurrence by two-thirds of each branch of the Legislature, and with a reserved power of revocation by the Legislature."[2] After reviewing at length the Dartmouth College case and other cases bearing upon the right of legislative bodies to amend or repeal corporate charters, the court said:

"This long review of authorities shows that there is no decision of any sort in opposition to the plain, logical interpretation of the phrase, 'reserved power of revocation by the Legislature,' as meaning the power to revoke, at the pleasure of the Legislature, any or all of the franchises granted to a corporation, the power to recall all the rights, privileges, or franchises granted to a corporation, or any number less than all, or any single right, privilege or franchise; that it cannot mean less than this, and that it cannot mean more, and that it differs from the reserved power to 'alter, amend, or repeal the charter' in not including the power to regulate or control corporations in the manner illustrated by the cases I have cited."

In this particular case the right of the Wilmington and Brandywine Springs Railway Company to enter upon the streets of the city of Wilmington with its railway was denied, however, on the ground that the company had forfeited its charter through failure to complete its road within the time required by law. Subsequently, the People's Railway Company, incorporated under the general laws, secured a franchise from the city of Wilmington, and was permitted to construct a competing line of street railways. When the matter was litigated the chancery court held that the exclusive features of the Wilmington City Railway Company's charter had been repealed by implication when the Delaware

[1] *See* 8 Delaware Chancery Reports, 468, case of Wilmington City Railway Company *vs.* Wilmington and Brandywine Springs Railway Company, March term, 1900.

[2] Section 17, Article 2, Constitution of 1831.

legislature passed a general act under the new constitution providing for the organization of corporations and broad enough to permit the incorporation of street railway companies with general powers.[1]

[1] *See* case of Wilmington City Railway Co. *vs.* People's Railway Co., 47 Atlantic Reporter, 345.

CHAPTER XXIX.

STREET RAILWAY FRANCHISES GRANTED FOR COMPENSATION.

389. The theory of compensation.
390. Heavy gross receipts tax devoted to park purposes; uniform fares; right to purchase after fifteen years.—Baltimore's early street railway franchises.
391. Baltimore's present franchise policy.
392. Eight per cent tax on gross receipts, with radical penalty for nonpayment; elaborate service regulations; local franchise affecting transit lines in two states.—The Kansas City "Peace Agreement."
393. Effort to obtain easier franchise conditions blocked by referendum vote.—Kansas City, Mo.
394. Compensation adjusted to win the votes of taxpayers.—Denver.
395. Franchises to bidders offering lowest fare; license tax per foot of car length; grants limited to twenty years.—Cincinnati general ordinance of 1879.
396. A fifty-year franchise obtained under the Rogers law; six per cent of gross receipts paid to city; no provision for future extensions; revision of terms at end of twenty years.—Cincinnati.
397. General laws of California relating to street railways.
398. Street railway franchise policy outlined in the charter of San Francisco.
399. Street railway franchise grants in San Francisco subsequent to the earthquake and the graft exposures.
400. Differential rates of fare; heavy percentage payments; a monopoly operating under competitive grants.—Richmond, Va.

389. The theory of compensation—Often, but not always, street railway franchises have a controlling principle. The underlying theory of perpetual grants is that private interests should be given unlimited opportunities to exploit public services for profit. Exclusive grants are based upon the same theory with the further recognition that a local street railway system is a natural monopoly. In some cases exclusive grants go further and recognize the obligations naturally attaching to monopoly. Indeterminate franchises rest upon the theory that the public authorities should retain continuous control of the public streets and hold "the whip hand" in their relations with companies performing a public service for profit. But many franchises have been granted when the controlling idea in the public mind was that private corpora-

tions acquiring special privileges in the streets should be made to pay heavily for the privilege. Direct taxpayers, as a class, are likely to have a lasting interest in compensation as the basic theory of franchise grants. Other people, however, who favor the theory of compensation, do so for the most part recognizing it as a counsel of despair. They see the public service corporations in possession of the privileges, and have little hope that the regularly constituted authorities of the city or state will have sufficient power or wisdom to regulate the street railways as if they were in very truth a public business. Compensation often seems the easiest and sometimes about the only means of getting something in return for the arrogant tyranny of uncontrolled monopoly. In this chapter typical franchises will be discussed in the granting of which apparently the controlling idea was to secure from the companies direct financial payments of maximum size.

390. Heavy gross receipts tax devoted to park purposes; uniform fares; right to purchase after fifteen years—Baltimore's early street railway franchises.—The earliest street railway ordinance of Baltimore was passed March 28, 1859.[1] By this ordinance certain individuals, who afterwards organized the Baltimore City Passenger Railway Company, were authorized to lay "a double track of city passenger iron railways" in certain streets under the supervision of the city commissioner and the joint standing committee of councils on highways. The gauge of the tracks was to be the same as that for ordinary street carriages in use in Baltimore "in order to admit of the passage of such carriages upon the tram plate" of the railway. It was stipulated, however, that no vehicles should be permitted to use the railways for the purpose of carrying passengers for hire. Sunday operation was also forbidden under penalty of a fine of $50 for each car run on the Sabbath day. Cars were not to remain standing for passengers on the line of the routes granted, and every car running regularly on the railway was to pay $20 a year as a license fee. The rate of fare from any part of the city to any other part on the company's lines was limited to five cents. The rate of speed was limited to six miles per hour in the built-up portion of the city, and a

[1] "Public Service Corporations of Baltimore," *already cited*, page 67.

headway of not over ten minutes between six o'clock in the morning and midnight from April 1 to October 1, and from 7 A. M. till midnight from October 1 to April 1, was required. The company was required to agree with the proprietors of existing omnibus lines for the purchase of their horses, carriages and stabling, to be paid for in cash before construction of the railway was to be commenced. In case the price demanded by the proprietors of the omnibus lines was deemed excessive, the matter was to be referred to arbitration, and if the omnibus lines refused to sell out at all, the company was authorized to proceed to the construction of the railway without paying any further attention to them. It was provided that "all the cars, iron rail and other material" used in the construction and maintenance of the railway, and all labor necessary to its construction or operation was to be "made, manufactured, employed, and obtained in the city of Baltimore, and not elsewhere, unless it shall appear, after due effort by advertising that any part thereof cannot be had or obtained within the prescribed limits, in a reasonable time." The company was to keep the portion of the street covered by the tracks and extending two feet on either side in repair and free from snow or other obstructions. No route authorized under this ordinance was to be abandoned or its use discontinued unless a majority of the property holders along the route gave their consent, and in case of any such discontinuance a route could not again be used unless the company secured a new consent from the city council.

The city reserved the right within two years after the expiration of fifteen years from the passage of the ordinance to purchase and buy out the stock and interest of the company with such appurtenances belonging to the company's railways as the city might deem proper. The purchase was to be at a price representing "a fair and equitable consideration or value," and in case of disagreement the matter was to be settled by arbitration. In case the city should decline or neglect to notify the company of its intention to purchase the plant within the two years following the expiration of the fifteen years, then the company's rights were to continue for fifteen years longer subject to the conditions and terms contained in this ordinance, and renewable thereafter every fifteen years under the same terms and conditions. The

company was required to pay into the city treasury one-fifth of its gross receipts accruing from passenger travel on the roads located within the city limits under the franchise, or within any extensions of the city limits thereafter made. All of the proceeds of these payments were to be applied to the establishment and improvement of the "city boundary avenue" and to the location, purchase and improvement of parks, each one to comprise an area of not less than fifty acres. It was stipulated that the city should have the power, however, on the completion of these improvements to reduce the rate of fare on passenger travel to such a limit within the range of one-fifth of the gross receipts as might be deemed advisable, the city at the same time relinquishing its interest in the receipts to the extent of such reduction of fare. The company was required to give a bond in the sum of $100,000 to insure the faithful performance of its obligations.

The franchise rights granted by the city ordinance of 1859 just described, were conferred upon the Baltimore City Passenger Railway Company by a special act of the Maryland legislature passed in 1862.[1] In 1864, however, an act was passed reciting the burdens imposed upon the company by this ordinance and stating that the company's revenue from a five-cent fare was insufficient to run its road after paying one-fifth of all fares into the city treasury for park purposes. Accordingly, by this act the rate of fare was raised to six cents. In the following year, 1865, the rate was made six cents with a charge of four cents for a transfer ticket. Still later, the rate was raised to seven cents, but has since been reduced to five cents, with substantially universal transfers. Commenting upon the wisdom of Mayor Swann in dictating the provisions of the first street railway franchises in Baltimore, the Massachusetts special committee appointed in 1897 to investigate the relations between cities and towns and street railway companies, said:[2]

"In the light of the present conditions and development of the business, it seems strange that a mayor of Baltimore, thirty-seven years ago, should have invented a plan and put it in operation which provided liberal payment for the use of the public streets, by levying a tax on gross receipts, which is conceded now to be the most equitable basis

[1] Public Service Corporations of Baltimore, *already cited*, p. 68.
[2] Report, February, 1898, p. 115.

of a system of taxation; provided the public with five-cent fares and free transfers, which are now almost universally adopted in the principal cities of the United States; recognized the principle of the vehicle tax, or a special tax for driving a car in a public street; directed that the income derived from street railway corporations should be treated as a separate fund, and used only for the care and maintenance of highways and public parks,—in fact, provided then for a solution of nearly all the problems that are now attracting public attention in the relations of street railway corporations to municipalities."

391. Baltimore's present franchise policy.—In several of the larger cities of the country, the earliest street railway franchises protected the public interests to a degree that has appeared surprising to succeeding generations. We have already noticed how the wisdom of Philadelphia's early street railway ordinances has been successfully overcome by the complaisant stupidity of the city's present officials. Baltimore, though in some respects less fortunate in its early ordinances, has in recent years been protected against reaction by the terms of the city charter.[1] Since the adoption of the reform charter about twelve years ago, street franchise grants have been limited to a period of twenty-five years, with a possible provision for a renewal of twenty-five years more upon a fair revaluation. These provisions are similar to those incorporated in the Greater New York charter in 1897 and were unquestionably the result of a movement for limited franchises which began about that time to find effective public expression in some of the eastern states. Under the Baltimore charter, also, a franchise may provide that upon the termination of the grant the plant and property situated in and about the highways shall become the property of the city without further compensation than the enjoyment of the grant, or that the property may be purchased by the city upon a fair valuation. If the city acquires the property without money payment, it may at its option take and operate the plant on its own account, or may renew the franchise for a term of not more than twenty-five years at a revaluation, or may sell the franchise to the highest bidder at public sale. If the city reserves the right to acquire the property by purchase at the end of the original franchise period, there must be excluded from the price any value derived from the franchise itself. The city has the option, in case it

[1] *See* "Digest of City Charters," prepared by A. R. Hatton for the Chicago Charter Convention, 1906, p. 114.

purchases the property, to operate the plant on its own account for five years and then determine either to continue the operation or to lease the plant with a franchise for a limited period, or to sell the plant to the highest bidder. Every franchise must contain provisions by way of forfeiture or otherwise to compel compliance with its terms and to secure efficiency of public service at reasonable rates and the maintenance of the property in good condition throughout the full term of the grant. No street franchise may be granted until it has been advertised in a daily paper for at least three days at the expense of the applicant. The city is required to reserve in all grants, the right of full municipal superintendence, regulation and control, not inconsistent with the terms of the franchise.

Under these charter provisions the city has granted several extensions of street railway routes. The most significant provision of these grants, in addition to the provisions made mandatory by the charter itself, is the one relative to arbitration when the company and the city are unable to agree as to the fair valuation of the property for purchase. It is provided that one of the arbitrators shall be appointed by the mayor and one by the company and if these two cannot agree within a reasonable time they shall select an umpire. In case, however, the company fails to name its arbitrator, or in case the two first appointed do not within a reasonable time choose an umpire, then the mayor is to appoint both the arbitrators and the umpire.[1]

The street railways of Baltimore are now consolidated under the United Railways and Electric Company which pays to the city a tax of nine per cent of its gross receipts on all lines within the city limits except about twenty-two miles of track constructed on private rights of way mostly along old turnpike roads. For the year ending December 31, 1908, the amount of this tax was $428,555.[2] In the original franchises, the gross earnings tax was fixed at twenty per cent, but was later reduced to twelve per cent, and still later to the nine per cent which now obtains.

392. Eight per cent tax on gross receipts, with radical penalty for non-payment; elaborate service regulations; local

[1] *See* Ordinance 118, April 25, 1901, "Public Service Corporations of Baltimore," p. 89.

[2] "Annual Report of the Comptroller of Baltimore City," 1908, page 18.

franchise affecting transit lines in two states—The Kansas City "Peace Agreement."—One of the earliest of the elaborate and carefully drawn street railway franchise settlement ordinances which are becoming characteristic of the more progressive American cities, was the co-called "peace agreement" approved by the mayor of Kansas City, Mo., June 2, 1903, and accepted on the following day by the three street railway companies which under common control operate all the street railways in Kansas City, Mo., Kansas City, Ks., and two or three suburban towns.[1] Prior to this time the street railways of Kansas City were extensively operated by cable power. The purpose of the ordinance here under discussion was to prescribe the terms and conditions upon which the companies should make certain specified changes in their tracks, equipment and lines, including the electrification of the cable roads. When accepted by the companies the ordinance was to become a fixed and binding contract covering all the lines of street railway existing in Kansas City, Mo., within the city limits as they then were or as they might thereafter be extended, as well as additional lines of railway which might in the future be constructed under the ordinance. The companies were required to pay the city annually a sum equal to eight per cent of the gross car and track earnings of all their lines in Kansas City, Mo., including a line to Independence, Mo., and another line to be constructed to Swope Park, outside of the city limits. There was also to be included in the gross earnings for the purpose of the percentage payments, one full fare for each passenger taken from or to suburban lines within the state of Missouri, less such sum, not exceeding one cent per passenger one way, as might be paid to the suburban lines. There was also to be included such proportion of the charges for carrying parcels to or from points outside of the city over lines within the city as the distance carried within the city bore to the whole distance carried. All collections for track earnings on tracks in Jackson County, Mo., were to be included, and on all suburban lines within the state and partly in some other state, there were to be included all fares and collections of the character described originating in Kansas City, Mo. It was provided, however, that out of this eight per cent of the gross earnings

[1] "Franchise Ordinances for Public Utilities," Kansas City, 1908, p. 35.

there were to be first paid all state, county, city, school and municipal taxes upon the property of the companies in Missouri of the character then assessable by the state board of equalization and used by the companies in operating the lines from which the gross earnings were received. There were also to be subtracted from this percentage all license and occupation taxes and taxes upon earnings that might be assessed or levied by the city or state upon such property in lieu of or in addition to existing taxes. License fees exacted by the city were also to be subtracted from the percentage, but taxes upon real estate and personal or mixed property not assessable by the state board of equalization and all legal special taxes and assessments for public improvements and for parks and boulevards were to be paid in addition to the percentage of gross receipts. The companies were required to make duly sworn statements of their gross earnings each week to the city comptroller, and the city reserved the right at any time to examine the books, trip sheets, vouchers and papers of the companies so far as might be necessary for checking up their gross earnings. Moreover, the sum of $234,000 was fixed as an annual minimum of the percentage payments after June 1, 1903. It was expressly stipulated that the eight per cent should be reckoned for each year separately, so that in case the percentage of gross receipts should in any one year exceed $234,000, the companies should not have any credit on account of such excess on any other year's payments. It was also stipulated that if the residue of the eight per cent, after deducting the taxes which were first to be taken out of this fund, should be less than a sum equal to $50 per car per year on the average number of cars operated, then the city should have the right to collect such additional sum as would be equal to the aggregate of such car license fees.

It was provided that for certain extensions specified in the ordinance the necessary consents of abutting property owners should be obtained and the right was reserved to any citizen to secure these consents if the companies failed to do so. The ordinance then specified in detail the times within which electrification should be completed on the different lines of street railways and the points to which the lines should be extended in connection with such electrification. Existing

routes on certain streets were to be abandoned and the tracks removed by the company. A provision was made for the construction by the company of a viaduct on Charlotte street over the steam railroad tracks of the Kansas City Belt Railway Company at the joint expense of the companies concerned. In case the steam road, however, refused to pay its fair share of the cost of the viaduct and approaches, the city bound itself to pass the necessary reasonable ordinances requested by the street railway companies to compel the cooperation of the steam road to the extent of paying two-thirds of the expense of construction and maintenance of the viaduct. The street railway companies were given the right to bring suit in the city's name to compel the steam road to "pay up," but the failure of the latter to join in the construction of the viaduct was not to relieve the street railway company from the duty to cause the viaduct to be constructed within the time specified. As soon as completed, the viaduct and its approaches would become the property of the city subject to the right of occupancy by the street railways.

The city reserved any right it then had to control and regulate the routing of cars upon the existing or future lines of the companies. It was provided that certain routing specifically required by the ordinance should not be held irrevocable or unchangeable, but should always be subject to reasonable alterations and changes by the law-making authorities of the city, subject to the rights of abutting property owners. On certain lines the company was authorized to operate a single track in the center of the street, with the right reserved to the city to compel the removal of the track to the side of the street and the construction of a second track whenever the city should direct. Provision was made for a downtown loop over which the cars of any other street railway might be run on terms and conditions which the common council might thereafter specify by reasonable ordinance. This provision for joint trackage rights was in addition to the rights reserved by what was known as the "three block and loop clauses" set forth in an ordinance of April 14, 1900, and in certain sections of an ordinance of February 5, 1889. In case the companies should dispute the reasonableness of any ordinance passed by the city permitting the

joint use of tracks, the company desiring such joint use, pending determination of the dispute, was to have the right to use the tracks, poles, wires and electric currents upon receiving proper authority from the city and upon executing to the company owning or operating the tracks a sufficient bond to guarantee the payment of the compensation that might be fixed in connection with such use. As compensation for the use of the loop tracks owned by the city, the Metropolitan Street Railway Company was to pay $1200 a year and also was to grant the free use of its own tracks to the city and furnish the necessary power free for such street sprinkling cars or apparatus as the city might see fit to use in sprinkling the streets occupied by any of the railway companies, parties to this agreement. The sprinkling cars were to be operated by the city at its own risk.

In addition to the extensions specifically required by the terms of this agreement, the city reserved the right to compel the companies to make additional extensions and connections within the city limits as then established or as they might thereafter be enlarged, wherever such extensions were reasonably necessary for the convenience of the public, but not more than an average of one mile of double track per year prior to December, 1905, and not more than an average of two miles per year thereafter could be required under this provision.

The companies were required to pave, keep in good repair and repave the spaces between their tracks, between their rails and for eighteen inches on either side. In connection with the extensions ordered, it was stipulated that if the streets occupied by them were either macadamized or unpaved, the companies would be required to pave between their tracks and their rails with such materials as should be designated by the board of public works at the time of the construction of the railway. If thereafter the remainder of any street should be paved with a different material, the company could not be required to change the paving between their tracks and rails to correspond with the rest of the street until this space needed to be repaved, but at the time of paving the remainder of the street the companies were to pave with the same material the eighteen inch strip on either side of their tracks.

This agreement stipulated that all transfer privileges given and granted by the companies up to that time should be continued unless circumstances rendered them unreasonable. Furthermore, universal transfers were to be granted over all parts of the system in Kansas City, Mo., and also over the system in Kansas City, Ks., Rosedale, Argentine and intermediate points in Kansas, so long as the companies or their successors continued to control directly or indirectly, have an interest in, operate or have operating, traffic or carrying arrangements with the companies operating or controlling such street railway lines in the Kansas towns. It was expressly stipulated that transfers should be continued so long as any of the cars of the Kansas City, Mo., lines continued to operate over any of the tracks of the Kansas lines, or vice versa, "it being the intention that the provisions as to transfers shall extend to all street railway lines in Kansas City, Kansas, Rosedale, Argentine, and all such lines within any extension of the corporate limits of said cities or any of them, which shall receive from or deliver to, the said companies in Missouri any of their passengers or cars." The difficulty of providing universal transfer systems without opening the way for the abuse of the privilege is so great as to lend a special interest to the detailed provision on this subject in this Kansas City agreement. This provision is as follows:

"The foregoing provisions as to transfers shall not be so construed as to enable passengers to make what is commonly known as a 'loop.' By a 'loop' is meant such a system of transfers as will enable a passenger to return substantially to the initial point for a single fare,—it being the intention of this contract that transfers shall be furnished that will enable a passenger to go by a reasonably direct route to his destination at any point on the company's lines for a single fare, and the provision as to 'loops' shall not be so construed as to interfere therewith, but it shall not be so construed that a transfer shall be given so as to enable a passenger to go to one point and stop there and then return by some other route to the point from which he started. But the city specially reserves to itself the right and power by reasonable ordinances to regulate the matter of transfers so as to carry out the spirit of this section. The company may require a passenger who requests a transfer upon a transfer to then declare his destination."

The companies agreed immediately to place on all their roads good and convenient cars to accommodate public travel, and to keep them clean, roadworthy, properly heated and lighted and in good and safe order and condition. They also

agreed to keep their roadbed and tracks at all times in good order so as to afford safe and convenient travel, and the cars were at all times to be "equal in pattern, style, finish and condition to cars in ordinary use on the best managed and equipped lines of street railway in the United States." All cars were to be equipped with the best improved appliances for the protection of the lives and persons of passengers and of the travelling public. Cars were to be run at all times and places "at a reasonable rate of speed under the particular circumstances," but in no case were they to be run faster than fifteen miles an hour in the central district of the city, or more than twenty miles an hour outside of this district, within the city limits. Detailed minimum schedules of the various lines were embodied in the ordinance, but the city reserved the right at any time to regulate and prescribe by reasonable ordinance "the number of hours in each day and night the cars on said street railways shall run, and the speed and frequency with which cars shall be run." There was a special provision to the effect that the schedules embodied in the ordinance might be varied on Sunday so as best to accommodate the church, park and recreation travel. The companies were required to assume the duty of stationing watchmen at all steam railroad crossings and at street intersections and dangerous curves in the downtown district. The city agreed to pass the necessary ordinances requiring the steam roads to join the street railway companies in paying the expense of the crossing service. The street railway companies were also to maintain electric arc lights at steam railroad crossings, the expense of which was to be shared in like manner by the steam railroads. The street railway companies, however, were to maintain at their own expense arc lights at street railway crossings and at dangerous curves. The street railway companies were made primarily responsible for the stationing of watchmen and the furnishing of lights at crossings, but they were to be entitled to bring suit in the name of the city, if necessary, to compel steam railroads to bear their share of this expense.

The Metropolitan Street Railway Company was to furnish free, sufficient electric power to charge the storage batteries of the police and fire alarm systems of the city. Upon request of suburban railway companies connecting with the

city street railways, either at the city limits or within the city at points as near the city limits as it should be possible to make the connections, the city railway companies were to place their crews in charge of the suburban cars at the point of connection and carry the cars with the passengers through substantially to the center of the business district of the city, and in a prompt and businesslike way return the cars to the points from which they were received. The street railway companies were entitled to collect a full city fare from every passenger riding on a suburban car within the city limits, but were required to turn over to the suburban companies one cent for each passenger received from the suburban lines. This payment of one cent per passenger does not seem to apply to the fares collected by the street railway companies on outbound suburban cars. United States mail or light packages carried on suburban cars were to be delivered by the companies at the nearest point on their lines to the points of destination, but the city reserved the right to prescribe the kind of packages that could be carried on suburban cars within the city limits, or to prohibit the carrying of such packages entirely. Suburban lines that were unable to connect with the street railways at the city limits were given the right to connect with the tracks inside of the city limits as near to the limits as practicable, but this provision was not to be construed as a waiver of the city's right in each instance to determine whether or not it would permit the suburban cars to enter the city. Street railway companies were authorized to carry light packages or parcels not in the possession of passengers, but this was not to be done to the interference with passenger traffic. Rates fixed for this service by the company were to be uniform and reasonable, and subject to regulation by reasonable ordinance.

Special provision was made in this agreement for the construction of a double line street railway from Kansas City to Swope Park. A minimum schedule of service on the proposed line was prescribed, and the right was reserved to the common council by reasonable ordinance to modify this schedule. The words "reasonable ordinance" were defined as meaning "such an ordinance as shall not provide a schedule which shall cause said company to expend more money in the operation of the road than the amount of fares or other

compensation received by it through operating said road." The route to Swope Park was to be at least 150 feet wide throughout its entire length and was to be known as Swope Highway. The company's tracks were to be located upon a strip on one side of this highway, but not less than 30 feet from the side, unless another location was selected with the consent of the board of park commissioners. Moreover, the railway was not to occupy more than 30 feet in width of the highway, but upon this strip the companies were to have an exclusive right of way, subject to reasonable regulations and to public crossings as established by the county court or the park commissioners. The park board was given the right, however, to reduce the width of the route selected to less than 150 feet to avoid legal complications, but in any case the route could not be reduced to less than 30 feet in width. The companies were given six months in which to select the route, but if they failed to do so within that time, the park commission would have the right to select and secure the route. If the park commission should fail to select the route within twelve months after the taking effect of this agreement, then the companies were to be relieved from any obligation to secure more than a 30-foot right of way. Provision was made for the construction of a viaduct over the steam railroad tracks at Summit street, but in case the damages to property owners, when ascertained by private agreement or legal proceedings, should exceed $30,000 and the city was unwilling to pay the excess over that sum, the companies were authorized to construct the approaches to the viaduct to a width less than the full width of Summit street, but not less than 36 feet. If the steam railroad company whose tracks were to be crossed by the viaduct should refuse to pay its fair share of the cost and the damages, the street railway companies were to notify the city within thirty days, and within a reasonable time thereafter the city was to pass the necessary reasonable ordinance requested by the company to compel the steam railroad to cooperate in the construction of the viaduct and to pay two-thirds of the expense.

It was stipulated that in case the companies failed at any time to pay the sums due the city under the eight per cent clause within thirty days after such sums became due, then

the city should have the right "from time to time by its officers to take possession of all the property of said companies in Jackson County, Missouri, and to run, manage and operate said road or roads until said city shall collect the sum which may be due it," and in case of the companies' neglect to pay, then for the period of time during which they were in default, they were required to pay sixteen per cent of their gross receipts less twice the deductions of certain taxes already described. The companies were also required to keep on deposit with the city treasurer a fund of $1,500, to be drawn upon by the board of public works in paying the expense of work which the city had to do on account of the companies' negligence. It was also provided that whenever the removal of tracks or rails was necessary in connection with laying or replacing water pipes or constructing sewers, or for any other public service, the companies were to remove their tracks promptly and replace them at their own expense; but the city was required to use all reasonable expedition in making the improvements in order that travel might be interrupted as little as reasonably possible.

In case the companies failed, neglected or refused to comply with the provisions of this agreement or with any lawful ordinance of the city, then in addition to the city's rights or remedies under general law or otherwise, the powers and privileges conferred by this ordinance were to be forfeited and the ordinance become null and void. The companies, however, might contest the validity of any ordinance, and in that case no forfeiture would lie against them unless they refused to obey an ordinance after its validity had been finally decided, but the companies' obligation to build the extensions specified in the agreement was to be conditioned upon their obtaining the requisite consents of property owners. However, it was provided that if the companies failed to build the required extensions within the time and in the manner specified in the agreement, subject to extensions and emergencies for which provision was made, then in addition to forfeiture by the companies of the right to make the extensions, the city would have the right to take possession of the companies' property in Jackson County, and operate all of the lines of road until it should collect $250,000 over and above the expenses of the operation as

liquidated damages, in addition to the double percentage payment already provided for in such cases.

By this agreement, a franchise for the extensions and new lines running to June 1, 1925, was given and the companies agreed that all their rights and franchises, no matter how acquired, should by virtue of this contract expire on June 1, 1925, in case they had not expired earlier. It was expressly stipulated that in all cases where the companies were required to remove their tracks, as soon as the tracks were removed all of the companies' rights in the portions of streets thus abandoned, should immediately cease. It was also agreed that whenever the companies should cease regularly to operate their cars over any track or portion of track in good faith and as provided in the ordinance, they should be deemed to have abandoned such track and should forthwith remove their fixtures from the streets and restore the pavement to a condition satisfactory to the city engineer.

The city expressly reserved the right to allow other companies to use the extensions granted by this ordinance for a distance of three consecutive blocks or less, on such terms and for such compensation to the owners as might be prescribed by reasonable ordinance.

The companies were required to furnish free, but at the risk of the city, such power as might be necessary to operate the special fire pumps, but not to exceed 500 horse-power, to be used in case of fire.

393. Effort to obtain easier franchise conditions blocked by referendum vote—Kansas City, Mo.—This ordinance of 1902, or "peace agreement" as it was called, proved so unsatisfactory to the companies that late in 1909 they attempted to get a new settlement which would extend the franchises to June 1, 1951, subject to the right of the city to purchase the property after 1945, and which would eliminate all reference to the payment of percentages on gross receipts and would provide for a reduction of fares to the rate of six tickets for a quarter or 25 tickets for a dollar, with half fares for children between seven and twelve years of age.[1] The proposed new settlement was asked by the companies on the plea that otherwise they would be unable to refund some

[1] *See* "Franchise Facts," a campaign pamphlet compiled by J. W. S Peters, December 10, 1909. This pamphlet contains a reprint of the new proposed franchise that was voted down by the electors.

of their bonds, which were about to fall due. The arrangement was so unsatisfactory that although it was passed by both branches of the common council and approved by the mayor, it was overwhelmingly defeated when submitted to popular vote at a referendum election on December 16, 1909. One of the strong points urged against the new ordinance was its curious forfeiture provisions. Under this proposed franchise the companies expressly agreed to comply with the terms and conditions of the ordinance throughout the period of time covered by it and so long as they continued to operate any street railways under it. They further agreed that if they should make default in the observance of any of the conditions of the ordinance and if such default should continue for a period of three months, exclusive of times during which they were delayed without their connivance by unavoidable accidents, labor strikes or orders of court, after written notice had been served upon them by the city, then the city by securing the judgment of a court of competent jurisdiction might declare the rights and privileges of the companies forfeited. It was provided, however, that the companies were to have ninety days in which to make good their default after the judgment of the court had been entered, and if within that period they should perform the acts required of them, then on motion the judgment was to be "annulled, set aside and avoided." In other words, the companies could continue the violation of the ordinance for three months after receiving written notice from the city; they could then postpone judgment as long as possible by litigation through the courts; they could then go on violating the ordinance within one day of three months longer, and if on the last day of this last period they complied with the terms of the ordinance, the judgment would be annulled. Thereupon the companies could begin again to violate the ordinance and go through the same process of delay. It can readily be seen that in the matter of fares, this process could be carried on endlessly with very little loss to the companies and without any redress for the city from the forfeiture clause. But even this grotesque forfeiture provision was further limited, for the proposed ordinance provided that the right of forfeiture should not be asserted against the mortgagees of the companies' property or affect their right to

recover by foreclosure of the property, including the franchise, the face value of the notes, bonds or other evidences of indebtedness up to an amount within $3,000,000 of the actual value of the property to be determined as provided in the purchasing clause. Inasmuch as this forfeitable margin of $3,000,000 was only about one-tenth of the present value of the property as claimed by the companies, it can readily be seen that a successful forfeiture under the proposed ordinance at best would have scaled down the capitalization of the property not more than ten per cent.

394. Compensation adjusted to win the votes of taxpayers — Denver. —On May 15, 1906, the taxpayers of the city of Denver, who under the Colorado constitution are given the final word on city franchise grants, adopted a franchise granting to the Denver City Tramway Company the right to maintain its system of street railways for twenty years.[1] The company claimed that it already enjoyed rights unlimited as to time under previous franchises, but in spite of this fact, it was nothing loath to make use of the Initiative to place before the taxpayers a new grant drafted according to its own notions of propriety. This ordinance recites that public needs require certain extensions of the existing street railway system which the company is willing to undertake upon the terms later set forth. In the preamble to this ordinance, the company also sets forth its claim that "it is now entitled and has at all times, and will indefinitely be entitled," under the terms of prior grants and without any further franchise from the city, to operate and maintain its existing system of street railways, "and to extend the construction and operation of its street railway system wherever such extensions and operations are required for the public convenience." Inasmuch, however, as these claims have been disputed by the city, and certain litigation has arisen concerning the validity, extent, scope and duration of the company's franchises, and as it is desired to proceed with the extensions, improvements and new construction forthwith, without awaiting the outcome of the litigation, but without prejudice either to the company's claims or to the city's claims, an ordinance giving an undisputed twenty-

[1] "Franchises and Special Privileges," granted by the City and County of Denver 1907, p. 434.

year franchise is proposed. All of the streets covered by the company's existing tracks, as well as those upon which extensions are desired, are enumerated in the ordinance. The company agrees to pay the city during the life of the franchise, the sum of $1,200,000 in equal monthly instalments of $5,000. This payment is in lieu of all car licenses. The money received by the city is to be kept separately by the city treasurer and is to be known as the tramway fund. Money from this fund is to be used solely for the establishment, improvement and maintenance of the streets, boulevards and parks of the city. The gauge of the company's railway must not exceed four feet eight and a half inches, but "wherever needed or desired" the company is authorized to construct and maintain two gauges by laying a third rail. Poles are to be set on the sidewalk at the curb line, not less than 100 feet apart except at street crossings and curves. Trolley wires must be suspended at least eighteen feet above the rail. Whenever any street occupied by the company's tracks is ordered paved, the company must pave the portion between the rails of each track and two feet on the outside of each rail and keep such paving in repair. Fares on the company's lines are limited to five cents for adults. Children between six and twelve years of age are carried at half fare, and children under six are carried free. At all points of intersection of its lines, the company must transfer its passengers without additional charge, but it may not be required to transfer passengers from one of its lines to another that reaches a section of the city adjacent to that reached by the first line. Within the downtown district, the speed of cars on the streets is limited to ten miles an hour, and within a specified belt outside of the central district, speed is limited to fifteen miles an hour. There is no limit placed upon the speed of cars outside of this belt. The ordinance provides, however, that the company shall conform to all existing general ordinances concerning the health, convenience and safety of the passengers and of the inhabitants of the city, as well as to any further general ordinances that may be necessary in the future and that may be put into effect by the city under its legislative police powers. Thirty-two extensions, which the company agrees to make at its own expense, are enumerated

in the ordinance. Two viaducts are to be extended and one is to be strengthened and reconstructed by the company, and the old cable construction on certain streets is to be removed and replaced, at the rate of not less than four miles a year. The extensions are to be constructed at least at the rate of ten miles a year, and in case the extensions enumerated in the ordinance are not carried through as provided by its terms, the city council may declare the company's franchises forfeited so far as they relate to streets and places that have not been occupied, but it is stipulated that "no right shall be forfeited or annulled upon any streets, alleys, viaducts, bridges, public ways or places upon which street railways shall have been built or constructed." In other words, the company is authorized and directed to make these numerous extensions, but if it fails to do so no substantial penalty can be attached to its negligence. The ordinance expressly provides that it shall not constitute a waiver of any right claimed by the company or any of its predecessors, and that it shall not be considered as a waiver in any pending litigation between the city and the company to the prejudice of either party, so far as the validity, scope or duration of any of its franchises is concerned. A penal bond in the sum of $50,000 was to be executed by the company to guarantee that the terms and conditions of the franchise would be observed by the company and that the city would be indemnified from any damages arising out of the exercise of the grant.

395. Franchise to bidders offering lowest fare; license tax per foot of car length; grants limited to twenty years—Cincinnati general ordinance of 1879.—The general ordinance adopted by the common council of Cincinnati February 7, 1879, which governed the granting of street railway franchises prior to the renewal grant of 1896 under the Rogers law, and which was continued in force except in so far as its terms were inconsistent with that grant, is a document of unusual interest.[1] Under this ordinance every application for permission to construct and operate a street railroad was to be presented in duplicate to the board of public works and the common council, setting forth the name of the ap-

[1] Ordinance No. 2,954, "An Ordinance Providing for the Construction, Operation and Government of Street Railroads."

plicant, the proposed termini, the streets to be occupied and the number of all tracks to be laid in each street, with the necessary turnouts, sidetracks and turntables to be delineated on a plat to be furnished with the application. Upon the filing of such petition the city clerk was to publish a notice of the application for three consecutive weeks, and thereafter the board of public works was to consider the application and transmit its recommendations to the common council, with an ordinance establishing the routes and a resolution requiring the advertisement for sealed proposals to construct and operate the railway, with such modifications as the board might recommend, at the lowest rate of fare in accordance with the stipulations of the ordinance. Each proposal was to specify the rates of single cash fares and the number of commutation tickets to be sold for $1, for 50 cents and for 25 cents. When the proposals had been received and opened by the board of public works, and the party who had offered to carry passengers at the lowest rates of fare had paid $100 to the city auditor to cover printing expenses and had filed the written consent of the property holders along the proposed route representing the majority of feet frontage, the board of public works would be authorized to transmit to the common council a formal ordinance granting the franchise with the recommendation that it be passed. Within thirty days after the passage of such ordinance the grantee was required to file a written acceptance together with a bond in the sum of $25,000 to guarantee faithful compliance with the terms of the ordinance and to indemnify the city against damages that might result from the construction of the road. The board of public works would have the right to prescribe what portions of a street should be broken up at a time and to direct at how many points the work might be carried on. The right to construct a street railway was not to be transferred or assigned by the grantee without the consent of the board of public works and the common council. All construction and repair work was to be subject to the supervision of the board, and the owner of the street railway was to pay the cost of engineering and inspection. The construction of any road was to be begun within three months from the date of the grantee's contract with the city, and the whole line was to be completed

and in operation within a time fixed by the board, not exceeding one year. In case any track should not be used in good faith for the period of six months, it was to be removed by the owner within ten days after notice. In case any portion of the road was not completed within the time prescribed, the board of public works would have the option to finish the work at the owner's expense in streets already broken up, and the owner was prohibited from any further prosecution of the work until he had reimbursed the board for this expense. In case the board should not exercise this option, the owner of any such incomplete road would be required to cause the passengers on the road to be carried to its terminus without additional charge in omnibuses or on some other street railway. The gauge of all street railways was fixed at 5 feet 3 inches "measured to the top of the shoulders of the rails on the inside." The city reserved the right to authorize the joint use of not to exceed one-tenth of the route of any particular street railway in addition to that portion of the tracks of all street railways lying within a certain prescribed area in the heart of the city. Any company using another company's tracks was to pay the owner a proportionate share of the cost of construction and maintenance, and in case the the companies concerned should fail to agree, the board of public works was authorized to appoint an arbitrator whose decision in the matter would be final. The city also reserved the right to make use of the street railway tracks between midnight and four o'clock in the morning for the purpose of hauling material in city cars, but the running of the company's cars during these hours was not to be hindered or unnecessarily delayed by such use.

A car license fee, as in the renewal franchise under the Rogers law, was to be paid on the basis of $4 per lineal foot inside measurement. Under the old ordinance, however, the gross earnings tax was only 2½% and the right of the board of public works or the common council to inspect the street railway books either directly or by an agent, extended only to the purpose of ascertaining the amount of the gross earnings. The owners of existing street railways were authorized to accept the terms of this ordinance, but on condition that in the case of certain specified routes they should sell tickets "in packages of twenty-five for one dollar, twelve for

forty-eight cents, and six for twenty-four cents," and in the case of another specified route, should charge four cents cash fare and sell tickets at the rate of twenty-five for 90 cents, twelve for 45 cents and six for 23 cents. Rates of fare were in no case to be increased beyond the rates specified in already existing contracts. It was stipulated that any franchises granted under this ordinance should be for a period of twenty years, and the rights of any existing company accepting the ordinance should be extended for the same period from the date of acceptance. It was stipulated that upon the expiration of any grant in case the franchise was not renewed or extended, the cars should cease to run, if it was so required by an ordinance of the council, and the tracks should be removed from the streets and the streets replaced in thorough repair, at the expense of the owners of the tracks. But if the right to operate a street railway through any of the streets occupied by the owner of an expiring franchise was granted to any other person, the latter would be compelled to purchase the existing tracks at an equitable price, as fixed by agreement or by an arbitrator appointed by the board of public works, whose decision, if approved by the board, would be final. Detailed rules for the operation of cars were set forth in this ordinance, some of which are of considerable interest. The rate of speed was limited to six miles an hour. Cars were not to stand on any street more than three minutes except with the permission of the board of public works. "Cushioned seats" were not to be used in any car between the first of May and the first of November. The cars were to have doors and platforms as wide and steps as low as practicable. It was stipulated that "no bells shall be attached to either of the animals drawing any car." Processions were not to be permitted to interfere with the running of cars. These regulations as well as all other reasonable regulations then in force or thereafter lawfully adopted, were to apply to all existing street railway companies. An extension of route might be granted to any company upon application showing the consent of the property owners. No advertisement was required. But the term of the extension was in every case to be limited to the period of the original grant and the charge for carrying passengers was not to be increased by reason of any such extension.

396. A fifty-year franchise obtained under the Rogers law; six per cent of gross receipts paid to city; no provision for future extensions; revision of terms at the end of twenty years — Cincinnati. —Ohio has long been a state of short-term street railway franchises. In 1896, however, when the Cincinnati franchises were about to expire, the street railway interests secured the passage by the state legislature of what was known as the "Rogers Law," by which cities were authorized to extend short-term railway grants for a period of fifty years. Shortly thereafter resolutions were adopted by the board of administration of Cincinnati granting a fifty-year extension of time to the Cincinnati Street Railway Company. This extension covered not only the company's own lines, but the routes of two other companies which were about to be consolidated with this one. Indeed, the grant was made upon condition that the roads of the several companies mentioned in it should be brought under common ownership and control. The terms and conditions of the grant, including those relating to rates of fare, car license fees, gross earnings tax and transfers, were to be subject to revision and change at the end of twenty years, and every fifteen years thereafter, by the board of administration or the common council of the city after a public hearing. It was provided, however, that the terms so fixed should be equitable according to the cost of carrying passengers at the time and should be acceptable to the company, or in case the city and the company could not agree, then all questions with respect to these matters were to be submitted to the adjudication of a court of competent jurisdiction upon suit brought by the company to enjoin the city from enforcing the terms and conditions that had been fixed by it. By this ordinance all the lines of street railways belonging to the companies concerned were arranged in specific routes, each to be separate and distinct and not "to depend upon the validity of any other, or all the others." The company was authorized to use cables, electricity or any other motive power that might be approved by the board of administration. Cars were to be run continuously (or by transfers) in each direction on all the company's routes from terminus to terminus between six o'clock in the morning and midnight as frequently as the convenience of the public might require, and within six

months after the acceptance of the franchise cars were to be operated on certain routes named in the grant between midnight and six o'clock in the morning. Furthermore, the board of administration reserved the right to designate additional routes from time to time upon which night cars should be run. It was provided that the company should grant and accept transfers over its various routes according to a schedule described in the franchise. The transfers were to be issued upon demand at the time of payment of fare or within three minutes thereafter. It was expressly stipulated that transfers should not be transferable, but should be presented within ten minutes after the arrival of the passenger at the transfer point, or on the first car passing over the transfer route without regard to time limit. A person holding a transfer might present it at the transfer point or at any point further along on the line if he presented it within the time required. The company was required to place a placard in each of its cars showing the termini of the route and a list of the transfers required to be issued. The board of administration reserved the right within six months after the acceptance of the grant, if it should be found proper and necessary, to change or add to the transfers the company was required to issue. It appears that in one street the company had prior to this time taken to the sidewalk, for by this franchise it was required to remove its tracks from the sidewalk on either side of Clifton avenue between certain points, and to relay them in the center of the street. Certain extensions described in the franchise were to be constructed within one year.

On all the routes the company was authorized to charge a cash fare of five cents subject to transfer obligations, but on one route tickets were to be sold at the rate of six for twenty-five cents and on another at the rate of thirty for a dollar, fifteen for fifty cents, or seven for a quarter, but in case the passenger on either of these routes desired a transfer, he would have to pay the full fare. Children under ten years of age were to be carried at a cash fare of three cents, or at the rate of two for five cents, and children in arms were to be carried free. It was further stipulated that in all cases where the company operated its routes or portions of them without an inclined plane, the company would have to issue tickets at the rate of ten for twenty-five cents, each one good

for a ride "on the truck of any of said inclined planes from the top to the bottom thereof, or vice versa."

It was expressly stated that the provisions of the general ordinance of 1879, and of all other street railway ordinances not inconsistent with the terms of this grant, should remain in force, with particular reference to regulations governing the construction and maintenance of tracks, the character of rails, the wires, poles and fixtures to be maintained, and the necessary connections with generating stations, car-barns, etc. The company was by the terms of this franchise required to reconstruct all old tracks upon the order of the board of administration in streets about to be improved as well as in any streets where reconstruction was deemed necessary by the board. The company was required to pay to the city a car license tax of $4 per lineal foot, inside measurement, of every car operated on any of its routes, except substituted and extra cars for winter and summer use. The company was required, however, to submit a monthly report of all such extra cars, giving the number of them, the dates on which they were run and the occasion of their use. The company was also required to pay into the city treasury in quarterly instalments five per cent of its gross earnings on its lines, including future extensions, within the city limits and within the limits of Hamilton County. Reports of gross earnings were to be verified and the city auditor or any person designated by the board of administration was to have authority to examine the company's books and papers at any time to find out whether or not the proper amounts of license fees and gross earnings tax had been paid.[1] The company was required to pay $1,000 a year rental for the use of the city's tracks and poles on the Eighth Street Viaduct, and moreover was to contribute its share from time to time for the expense of keeping this property in repair. The company was also required to settle a judgment for $12,383, with interest, that had been obtained several years earlier against one of the company's subsidiaries. It was also stipulated that the company should acquire a certain portion of an old turnpike road in the outskirts of the town and donate it to the city free from all incumbrances. Cars operated by the

[1] The car license fees have now been abolished and the gross receipts tax increased to six per cent.

company were to be subject to the approval of the board of administration. Open cars were to be run in warm weather and closed cars (heated) were to be used in cold weather. As one of the conditions of the grant the company was required to pave and asphalt at its own expense a portion of Vine street and certain street intersections. A bond in the penal sum of $250,000 conditioned upon the faithful performance of the requirements of the franchise was to be executed by the company in favor of the city.

"This franchise," says a leading member of the Cincinnati bar,[1] "might be said to be notable in the following particulars: In the first place, there is no provision for extensions and the construction of extensions is entirely within the discretion of the street railway company itself. In the second place, there is no distinct grant of power to any municipal body to regulate the service given by the company, in any way, except as regards physical condition of tracks and cars. There is the general provision of the franchise to the effect that the service must be such as public convenience requires, but there is no express authority in any particular municipal body to enforce this provision. The Board of Public Service indulges in the practice of adopting and enforcing schedules, but the Cincinnati Traction Company has always denied its power to enforce schedules, and has kept itself consistently, in the position of accepting, without compulsion of law, and with such modifications as it pleases, the schedules proposed by the Board of Public Service. Thirdly, as to the rate of fare there is no control, except that a new rate of fare may be periodically adopted, as more particularly set forth in the franchise itself, and subject to the conditions as set forth therein. There is an Ohio statute which gives the Board of Public Service and the Traction Company power to agree with each other, at any time, as to the change in transfer system or in routes, but there is no express authority in the municipality to decree any such changes without the agreement of the Traction Company."

The Rogers law under which the Cincinnati Street Railway Company secured this fifty-year renewal franchise remained on the statute books of Ohio only from one legislative session to the next. The outcry of the people against long-

[1] Alfred Bettman, Esq., in a letter dated June 22, 1908.

term franchises, and the success of the Cincinnati company in promptly securing the renewal of its privileges for the maximum period permitted by this law caused its repeal before the other large cities of the state, except Dayton, had acted under it. Street railway franchises may not now be granted in Ohio cities for terms of more than twenty-five years.

397. General laws of California relating to street railways.—Under the general street railroad law of California, franchises to lay railroad tracks in the streets and public highways of any incorporated city, city and county, or town may be granted by the local authorities for a term not exceeding fifty years under such restrictions and upon such conditions as the local authorities may impose.[1] Electricity, horses, mules, or wire ropes moved by stationary engines are specified as the kinds of motive power which may be used on street railways. In all cases the tracks must be laid on those portions of the streets designated in the local franchises and as nearly as possible in the middle of each street. The company must plank, pave or macadamize the portion of the street between its rails and for two feet on either side, and between its tracks if there are more than one, and keep this portion of the street constantly in repair and with good crossings. The gauge of the tracks may not be more than five feet and there must be left a sufficient space between the tracks to allow the cars to pass each other freely. Two or more lines of street railway operated by different companies may by lease or contract use the same street or tracks upon terms agreed upon between them, and may be permitted to use the same street or tracks for a distance of five blocks without such lease or contract "upon payment of an equal portion for the construction of tracks and appurtenances used by such railways jointly." Rates of fare on street railways may not exceed ten cents per passenger for any distance under three miles, and in cities of the first class may not exceed five cents per passenger for a single trip of any distance in one direction "along any part of the whole length of the road or its connections." Work to construct a street railway must be commenced in good faith within not more than one year from the date of the local franchise, and must be completed

[1] "Corporation Laws of California," 1907, p. 110.

within not more than three years from that date, but the local authorities in granting the franchise must fix the time for the commencement or completion of the road, subject to the limitation that the company must be granted at least six months for commencing its road and at least eighteen months for completing it. Failure to comply with the provisions of the general law or of the local franchise in regard to time of construction works a forfeiture of the franchise unless the uncompleted portion is abandoned with the written consent of the local authorities. Moreover, an extension of time of not more than one year may be given for the completion of the road, but no extension of time may be granted for the commencement of construction. In every franchise to construct street railways, the right is reserved to the city to grade, sewer, pave, macadamize or otherwise improve, alter or repair the streets, and this right cannot be alienated or impaired. Any such work, however, must be done so as to obstruct the railway as little as possible, but if necessary the company must shift its rails to avoid the obstruction made by such work. Every street railway company is required to pay to the city a car license fee to be fixed by the local authorities, at a sum not exceeding $50 per annum in San Francisco, and not exceeding $25 in other cities and towns.

398. Street railway franchise policy outlined in the charter of San Francisco.—The charter of the city and county of San Francisco, in effect January 8, 1900, pledges the city to municipal ownership of public utilities by the following specific provision.[1]

"It is hereby declared to be the purpose and intention of the people of the City and County that its public utilities shall be gradually acquired and ultimately owned by the City and County."

The board of supervisors, which corresponds to the city council in other cities, is authorized, however, "to regulate street railroads, tracks and cars; to permit two or more lines of street railways, operated under different managements, to use the same street, each paying an equal portion for the construction and repair of the tracks and appurtenances used by said railways jointly for such number of blocks, consecutively, not exceeding ten blocks; to fix, establish and reduce

[1] Article 12.

the fares and charges for transporting passengers and goods thereon; to regulate rates of speed, and to pass ordinances to protect the public from danger or inconvenience in the operation of such roads." [1] The board of supervisors is also given specific authority to grant street railway franchises for a term not exceeding twenty-five years on any streets not reserved for boulevards or carriage driveways.[2] The procedure to be followed in granting such franchises is prescribed in detail. First comes an application by a company desiring to construct a road. Then follows a resolution of the board of supervisors determining whether the franchise requested or any portion of it should be granted, and fixing the terms and conditions of the grant in addition to those provided in the city charter itself. Then notice of the company's application and the resolution of the board of supervisors must be advertised in the official newspaper for ten consecutive days. This advertisement must be completed not less than twenty nor more than thirty days before any further action is taken by the board. This advertisement must state the character of the franchise, the term of its proposed continuance and the route. It must also call for bids to be received prior to a specific time and must state that no bids of a fixed amount will be received, but that all bids must be for the payment of a stated percentage of the gross receipts of the road. All bidders must file bonds to guarantee their bids. At the next meeting of the board of supervisors after the time fixed for receiving proposals, the board is required to open the bids and award the franchise to the person or company offering to pay the highest stated percentage of gross receipts, but no award may be made unless the bidder offers to pay at least three per cent during the first five years of the franchise period, four per cent during the next ten years and five per cent during the ten years after that. Moreover, the board of supervisors may reject all bids and may refuse to grant a franchise for any part of the route for which application has been made. If, however, a bid is accepted, the franchise is to be granted by ordinance and at least ninety days must intervene between the introduction of this ordinance and its final passage. It requires a three-fourths vote of all the mem-

[1] Article 2, chapter 2, section 1, paragraph 27.
[2] Article 2, chapter 2, section 6.

bers of the board of supervisors to grant a franchise and a five-sixths vote to pass it over the mayor's veto. When any bid for a street railway franchise is accepted, the franchise must be granted upon the express condition that the percentage of gross receipts payable to the city shall be paid for each month on or before the tenth day of the next ensuing month, "and upon the further condition that the whole of the railway shall be continuously operated, and that at the end of the term the road-track and bed of such railway and all its stationary fixtures upon the public streets, shall become the property of the City and County; and that the grantees will, within one hundred days after the date of such grant, commence the construction of such railway, and continuously thereafter, in each and every month until the completion thereof, expend in such construction at least the sum of three thousand dollars." It is further declared in the city charter that the failure of the grantees to comply with any of the conditions just described "shall work an immediate forfeiture of such franchise and the road or track constructed thereunder." It is declared, moreover, that "there shall be no power in the Supervisors to relieve from such forfeiture or from any of said conditions." The company is in every case required to file a sworn monthly statement of its gross receipts. In granting the franchise, the board of supervisors may impose such other lawful conditions as it may deem advisable, and "must expressly provide that the franchise shall not be renewed or regranted, and that the Board shall at all times have the power to regulate the rates of fare to be charged by those using, operating, possessing or enjoying the franchise, and that the Finance Committee of the Board shall at all times be permitted to examine and expert their books as to such gross receipts."

399. Street railway franchise grants in San Francisco subsequent to the earthquake and the graft exposures.—It was after the provisions of the new charter went into effect that San Francisco fell under the control of the Ruef-Schmitz gang of bribers and blackmailers. In 1905 the United Railroads of San Francisco, which had up to that time operated their lines by cable traction, opened negotiations with the city for a permit to change the motive power in use to the overhead electric trolley system.

"At the outset there was a demand that on certain main arteries of the city the underground electric system should be used," says the report of the mayor's committee on the causes of municipal corruption.[1] "The United Railroads insisted on the universal use of the overhead trolley, and made no offer to share the great benefit of cheapened operation. Neither better seating accommodations nor reduced fares were to be had in exchange for this valuable privilege. The only offer, as against a grant worth many millions, was $200,000 to the city to be expended on its parks, they well knowing that any moneys expended on park improvement would be returned many times to the coffers of the road carrying the people thither."

While negotiations for the change of motive power were pending and after the company had arranged through its attorney, Abraham Ruef, to secure from the corrupt board of supervisors the desired permit, the terrible earthquake and fire of April, 1906, intervened. The mayor's committee charges that most of the company's cable lines suffered very little injury from this disaster and could have resumed operation inside of a month after the fire, but that the company deliberately fostered the belief that its cable lines were destroyed in order to force the city in the day of its distress to consent to the change of motive power, under the belief that the operation of the roads could be more quickly restored if equipment with the overhead trolley system was permitted. At any rate, pursuant to the bargain made before the fire, the board of supervisors passed the required ordinance authorizing the United Railroads to install the overhead trolley system. In consideration of the passage of this ordinance, sixteen supervisors received $4000 each, another received $10,000, and the chairman of the board received $15,000. In spite of the exposure, the United Railroads are now operating the overhead trolley systems under the rights thus acquired.

In January, 1906, the Parkside Transit Company applied to the city for a franchise for an electric road on certain streets to connect with the lines of the United Railroads.[2] The Company owned a large tract of land about a mile and a half south of Golden Gate Park which it desired to subdivide and

[1] "Report on the Causes of Municipal Corruption in San Francisco as disclosed by the Investigations of the Oliver Grand Jury and the Prosecution of certain Persons for Bribery and other Offenses against the State," by a committee appointed by Mayor Taylor, October 12, 1908, published by order of the Board of Supervisors January 5, 1910, p. 21.

[2] For the official history of the Parkside franchise grant, *see* San Francisco "Municipal Reports" 1907-1908, pp. 1165-66.

develop as a residential section. One of the company's attorneys who had $50,000 of stock in the project applied to Abraham Ruef, the San Francisco boss, for assistance. Ruef demanded money, which was paid, but the plot was discovered before the ordinance was passed.

"The most striking incident in connection with this transaction," said the mayor's committee,[1] "from the standpoint of one trying to analyze the forces which have combined to embarrass the people in these prosecutions, was the fact that the attorney who reported back the necessity for bribery was a former judge of the Superior Court and the then president of the San Francisco Bar Association, a man of ability, good social and professional standing, and attractive personality, and although it was made public that he had neither disclosed the crime to the District Attorney nor withdrawn from the investment nor given up his attorneyship or his directorship in the Parkside Company, he did not resign his presidency of the Association."

On March 26, 1906, the board of supervisors passed a resolution in accordance with the procedure required by the city charter determining to grant a twenty-five year franchise over the streets covered by the application of the Parkside Transit Company. Notice of sale of this franchise was published just prior to the earthquake, but on account of the confusion resulting from that disaster, the sale of the franchise was not carried through at the time set. The company renewed its application, however, in October, 1906, and on November 12 of that year, the board of supervisors passed a new resolution determining to make the grant. This resolution, in addition to the mandatory conditions of the city charter, stipulated that the grantee should pay an annual car license fee to be fixed by the board of supervisors at not more than $50 or less than $15 per car. The resolution also stipulated that firemen, policemen and mail carriers, while engaged in the actual discharge of their duties, were to be carried free on the road to be constructed by the grantee. There was only one bid for this franchise and that was put in by the original applicant, the Parkside Transit Company, which offered to pay for the franchise the minimum percentages required under the city charter. The bid was accepted and an ordinance granting the franchise was introduced. While the ordinance was still pending, however, the district attorney and the grand jury had been hot on the

[1] *Work cited*, p. 23.

trail of the grafters. When the ordinance came up for final passage in April, 1907, protests were made on the ground that it contained no provision for the sale of the road to the city, nor for an eight-hour day for employees. Attention was called to the fact that when the proposed franchise had first been considered, the officials of the company had announced their willingness to give a bonus of $100,000 to any person or company for constructing the road, and had stated that if the condition authorizing the city to take over the road was inserted in the grant, it would be impossible for the company to bid on the franchise, inasmuch as the United Railroads of San Francisco would refuse on such conditions to grant the new road reciprocal transfer privileges. Final action on the ordinance was postponed, and in July the personnel of the board of supervisors was entirely changed through the enforced resignation of the grafters. In September the majority of the new committee on public utilities reported against the passage of the ordinance, primarily on the ground that the passage of the ordinance "would ratify acts of corruption and betrayal of a public trust." The committee also raised certain objections to the franchise on its merits. One member of the committee, however, submitted a minority report in which he took the ground that the corruption connected with the early negotiations should not be permitted to have any effect upon the passage of this ordinance, which he deemed to be a meritorious one. In connection with his report, he submitted a detailed statement from the president of the Sunset District Improvement Club in answer to the objections set forth by the majority of the committee. His own attitude in the matter was expressed in the following words:

"Should your honorable body determine on a policy of enmity to public utilities and enterprises, or burden them with all that corporations will bear, the minority of your committee dares to foretell that the stream of the life of this City would soon run dry and the prosperity and industries now in existence soon be destroyed."

The upshot of the matter was that the company filed certain supplemental agreements to meet some of the objections raised by the majority of the committee, and finally secured the passage of the ordinance. Besides agreeing to make certain street improvements, the company stipulated that it

would construct its railway according to standard gauge, and that it would relinquish all rights conferred by the ordinance to construct either an elevated railway or a subway along the route described. The company also stipulated that the city should have "the right at any time during the last ten years of the life of said franchise to acquire the same, together with the power plant, poles, wires, roadbed, rails, rolling stock and other equipment of said railway at such fair and reasonable valuation as may be agreed upon by the holder of said franchise and the City and County of San Francisco, or, failing such an agreement, at such valuation as may be fixed by a court of competent jurisdiction." This last clause is certainly a curious "concession" to the city, for if the franchise were permitted to run its course, the tracks and other fixtures in the streets would revert to the city without cost, and the franchise itself would become extinct at the end of twenty-five years, while by this special reservation the city was given the right to purchase both the franchise and all the property at any time during the last ten years of the twenty-five year period.

By an ordinance approved September 14, 1908, a franchise was granted to the Presidio and Ferries Railroad Company for an extension of its line.[1] This grant was made in accordance with the regular procedure and subject to the conditions described by the city charter. The company was also required to maintain "so far as lies within its power" reciprocal transfer privileges with lines of street railroad intersecting its road at two specified points. It was also required to install and maintain first-class ornamental iron poles of a design to be approved by the board of supervisors for use in the permanent construction of its lines. Its feed wires were to be carried underground, however. On each alternate pole the company was to install and maintain at its own expense electric lights for street lighting purposes. The most significant thing about this grant, however, was that it was for a period ending December 10, 1913, the date upon which the company's main franchise would expire.

400. Differential rates of fare; heavy percentage payments; a monopoly operating under competitive grants—Richmond, Va.—By an ordinance approved August 28, 1895, the Rich-

[1] Municipal Reports, *already cited*, pages 1208-10.

mond Traction Company received a franchise for the construction of a railway over certain specified routes, including Broad street.[1] It was provided that the construction of the Broad street routes should be begun within ten days after the ordinance took effect, and should "be pushed diligently and without interruption or cessation toward conclusion" so that the company would have its cars in operation over the entire routes within nine months. All materials to be used and the manner of construction of the road were to be subject to the approval of the city engineer. Before commencing the work the company was required to deposit with the city treasurer $10,000 of city bonds or United States currency to guarantee that the work would be commenced and completed within the time specified in a manner satisfactory to the committee on streets. It was provided that if the company failed to have its cars in operation at the time required, or if after beginning the work of construction the company failed to prosecute the work "in a proper manner and with due diligence, to the satisfaction of the Committee on Streets," and continued in the improper prosecution of the work for ten days after receiving notice, all the privileges of the franchise would cease and the tracks laid in the streets would revert to the city. The company was required to render "fair service to the public" daily between six o'clock in the morning and twelve o'clock midnight. It was stipulated as a part of the company's undertaking to render fair service that its cars should be run on the Broad-street route on such a schedule that some one of the cars, both going and coming, should pass each point on the route between certain streets at least every five minutes. Authority was reserved to the committee on streets, however, to require from time to time that the company should furnish a quicker service, and service on the company's lateral routes was to be such as should be determined by the committee from time to time. The company was to keep its cars and tracks in proper repair and its cars in neat condition. The company was also required to equip its cars with fenders or other life-saving appliances approved by the committee, and if the company failed for ten days after notice of complaint to fulfill any

[1] "Franchises Granted by the City Council of Richmond, Virginia" to December 31, 1899, p. 106.

of these conditions to the satisfaction of the committee, it would be subject to a fine of from $10 to $100, each day's failure to be a separate offense. If the company should fail to rectify within ten days any grounds of complaint, unless temporarily prevented by unforeseen, extraordinary and impersonal cause, and should fail to satisfy the committee that thereafter fair and satisfactory service would be rendered and its cars and tracks be kept in proper condition, then it would be optional with the committee to notify the company not to run its cars upon any portion of the tracks in regard to which the complaint was made until authorized to do so by the committee or the city council. If at any time after forty-eight hours from the receipt of such notice from the committee the company continued to run its cars contrary to the committee's orders, the company would subject itself to a fine of from $10 to $100 for each car so run, each day's running to be a separate offense.

The roadway between the rails and the tracks and for two feet on either side was to be paved and kept in repair at the expense of the company. In paving, repairing or repaving, the company was to have the work done by the contractor employed by the city to do the remaining portions of the streets, on condition that such contractor would agree with the company to do the work at a cost not in excess of what he charged the city for an equal amount of work. All rails and materials used by the company were to be satisfactory to the city engineer. In case the company failed to perform any of these obligations for ten days after written notice, it would be liable to a fine of from $10 to $50 for each day's failure, and the city council would be authorized to forbid the running of any cars along the streets where the work was to be done until the company had fully complied with the city's requirements. In case of failure to perform its obligations with reference to the paving, repaving, repairing and grading of streets, the city engineer was authorized to do the work and the expense of it would become a lien upon the company's tracks prior to any other encumbrance upon them.

The company was given the right to operate its cars by electricity or any other motive power, except steam, that might thereafter be authorized by the city council. The city,

large number of routes.[1] This grant was made for a period of thirty years from January 1, 1900, unless it was sooner surrendered or forfeited. It was stated that this limitation of time was one of the essential and governing conditions of the grant, and accordingly the company was required to agree that it would at the expiration of the franchise period peaceably yield possession to the city of every street or public place occupied by it, cease to operate its street railway system and thenceforth "make no claim of any kind to exercise any right whatever" under the franchise, or under any charter or corporate right. The city reserved the right during the twelve months next preceding the expiration of the franchise period to give the franchise rights then being exercised by the company or its successors to any other person or corporation, and to deliver to such person or corporation the entire railway plant then located within the city. In such case, the value of the plant at the time of the expiration of the grant, and exclusive of the value of the grant itself, was to be estimated and paid for by the person or company to whom the new franchise was granted. The grantee was also required to keep its principal office in the city of Richmond, and keep its auditing and disbursing officers there, together with its books and accounts. At least three of the company's directors were to be residents of the city. Under this franchise no power house could be erected within a hundred yards of any school or church. The company was not to carry freight or United States mail on its lines without the consent of the council. The city reserved the right to require joint use of tracks and the interchange of transfers under practically the same conditions as those set forth in the Richmond Traction Company's ordinance already described. The company was required to operate all of its lines during the entire period of the grant in such a manner as to render efficient public service with ample motive power. Cars were to be of the most approved pattern and kept clean, well ventilated, provided with comfortable seats, heated whenever necessary for the comfort of passengers, and lighted at night with electric or some other equally efficient lights approved by the committee on streets. The cars were to be kept in good repair and equipped with life

[1] Franchises Granted by the City Council, *already cited*, p. 96.

guards. Each car was to have displayed on it the name of the line or point of destination in letters of such size as to be readily discernible by persons of ordinary eyesight. The tracks were to be laid in concrete construction whenever required by the committee on streets. The rails used were to be subject to the approval of the city engineer. The company was to pay the cost of paving and repairing the roadway in and about its tracks, the work to be done by the city's contractor and to be paid for on requisition of the committee on streets. This committee was given the absolute right to determine the amount of indebtedness due from the company.

The rates of fare were the same as those set forth in the Richmond Traction Company's ordinance, with certain minor modifications. Each passenger was to have the privilege of carrying free of charge one child under five years, but in case two or more such children accompanied the passenger, they were to be paid for at a half-fare rate. It was provided that a transfer should be used at the point of intersection of the line to which the passenger wished to be transferred. The company was also required to give a transfer upon a transfer wherever needed for the completion of a journey going in the same general direction. It was required that the passenger using a transfer must take the first car on the transfer line going in the direction of his travel. It was also required that tickets for school children should be placed on sale at convenient points in the city.

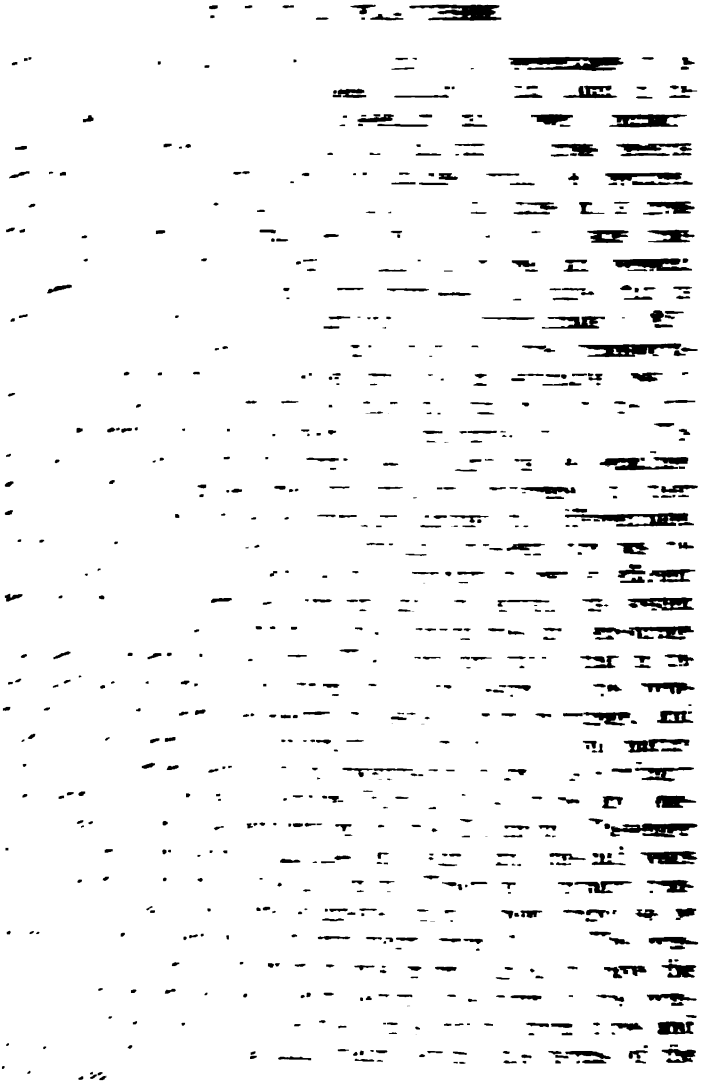
The company was required within ninety days after the approval of this franchise to submit to the committee on streets for its approval plans and specifications showing in detail the proposed new construction, reconstruction and re-equipment of the entire railway system covered by the grant. Whenever the committee on streets should be of the opinion that any portion of the company's tracks or equipment needed to be repaired or renewed, it would be the duty of the company to execute the repairs or renewals upon being given notice to do so. On the other hand, if the company on its own motion desired to make any repairs, it was to notify the city engineer and obtain his consent. In either case the character of the work and the quality of the materials used were to be satisfactory to that official. The company

was required, in the equipment of its roadbed and other fixtures, to use the most approved appliances to prevent injury by electrolysis to the water and gas mains and other improvements of the city, and to recoup the city for any damages occasioned by electrolysis. It was expressly stipulated that this grant should not be taken as conferring upon the company any right to construct or operate underground or elevated railways.

As compensation for this franchise the company was required to pay annually into the city treasury 3½% on the first $350,000 of its gross earnings; 5% on the next $100,000; 7% on the next $100,000, and 10% on all annual earnings in excess of $550,000. These payments were to be in lieu of all license taxes, but were not to affect the company's liability to general taxation on its property within the city limits, including all of its rolling stock.

Other conditions of this franchise were similar to those of the Richmond Traction Company franchise already described.

On January 10, 1910, the Virginia Railway and Power Company which had succeeded to the franchises of the Richmond Passenger and Power Company and the Richmond Traction Company through foreclosure proceedings, presented to the sub-committee on streets of the Richmond city council an argument for the extension, modification and consolidation of its franchises. In this argument the company stated that under the competitive conditions prevailing in the street railway business in the city, especially from 1896 to 1902, a mileage far in excess of the requirements of the community had been constructed. The company stated that many tracks were directly parallel with each other and only one block apart. It suggested that a rearrangement of trackage involving the removal of a considerable number of tracks and the construction of some new ones would be desirable. The company also stated that the specific provisions in the existing franchises relative to the schedule or headway of cars should be eliminated, and a general clause inserted requiring the company to furnish as much service as the traffic would reasonably warrant. It appears from the company's statement that the city council, in the exercise of its authority reserved under the Richmond Traction Com-



CHAPTER XXX.

LOW FARE STREET RAILWAY FRANCHISES.

401. The movement for low fares.
402. Workingmen's tickets introduced in Detroit in 1889.
403. The Detroit Railway franchise of 1894; eight tickets for a quarter; paving obligations assumed by the city; company given option on all future extensions; right of purchase reserved.
404. Confusion in Detroit's street railway operation; controversy over paving; devotion of people to low-fare franchise.
405. Graduated rates of fare; universal transfers; extensions in built-up sections; joint use of tracks by interurban roads.—Columbus, Ohio.
406. Old grants relinquished; all franchise rights to expire on fixed date.—Indianapolis settlement of 1899.
407. Six tickets for a quarter; motive power subject to change; emergency fund for city's protection.—Indianapolis.
408. The Indianapolis plan for future extensions of the street railway lines.
409. Model franchise provisions for efficient service contained in the Indianapolis contract.
410. Liberal compensation; joint use of tracks for interurban lines; right of purchase reserved; terminal station required.—Indianapolis.
411. Joint use of tracks; twenty-five tickets for a dollar; extensions compulsory.—Milwaukee.
412. Labor tickets at reduced rates; materials and plan of construction to be approved in advance; extra fare for luggage; joint use of poles.—Saginaw.
413. Transfers between companies; low fares for school children; free transportation for city officials; arbitration with employees; special permits for handling freight.—Seattle.
414. School children carried at reduced rates; city officials carried free; seats for passengers; right to purchase reserved.—Los Angeles.

401. The movement for low fares.—While the standard fare for street car rides in American cities has generally been five cents, with or without transfers as the case might be, there have been many variations from this standard. The extraordinary profits of the early street railway lines in the great cities, and the increasing use of street cars, aroused the public many years ago to demand something in return for the rich privileges which the companies were enjoying. In some cities the people demanded compensation in the form of money payments, such as have already been described in the preceding chapter and elsewhere. In other cases the demand was that the companies should share their

profits with the patrons of the cars by a reduction in the rates of fare. Indeed, lower street car fares has been one of the most potent local political issues in a number of important American cities, for considerably more than a decade. Mayor Hazen S. Pingree of Detroit was a pioneer in the low-fare movement. Tom L. Johnson, for many years mayor of Cleveland, became a national character of the first class through his struggle for three-cent fares in that city. The Cleveland settlement franchise, which has finally secured a comprehensive experiment in three-cent fares, subject to an increase if this rate proves too low, has already been described in a preceding chapter. In the present chapter, other low-fare grants will be discussed, including important franchises of Detroit, Columbus, Indianapolis, Milwaukee, Saginaw, Seattle and Los Angeles.

It should not be forgotten that on account of the rigidity in the rates of fare charged by a street railway company in pursuance of the terms of its franchise, or of the requirements of state law, prices of street railway service do not adjust themselves as freely to changes in the standard of value as do prices of commodities and services which are subject to the law of competition. With the standard rate of fare remaining nominally the same through a period of thirty years or more, the actual rate of fare as measured by the value of money was steadily increasing during the period of falling prices. It was almost at the end of this period that the agitation for lower fares got under way. That agitation has gone on to a considerable extent without reference to the fact that during a long period of increasing prices the actual rate of fare on the street railways has been decreasing, so that as measured by the value of money in terms of other commodities the five cents we now pay for a car ride is perhaps no more than three and a half cents would have been under conditions prevailing fifteen years ago. The movement for low fares sometimes tends to overreach itself, for the reason that if fares are reduced below a certain rate, especially when normal operating expenses are increasing, the result is sure to be an impoverished service. In the great cities where street car transportation is a daily necessity for multitudes of men, the quality of service is perhaps as important as the rate of fare. I do not wish,

however, to minimize the public importance of low fares. What we have to pay for various public utility services, including street car transportation, is a fixed charge upon the operating expenses of life. With the growing complexity of industrial society and the multiplication of middlemen and various agencies of distribution, it becomes doubly important that the fixed charge for each particular common necessity should be kept as low as possible in order that we may not become altogether bankrupt.

402. Workingmen's tickets introduced in Detroit in 1889. —The city of Detroit probably has more kinds of street railway fares and tickets than any other city in the country. The first street railways in Detroit were established under an ordinance approved November 24, 1862.[1] This original franchise was granted for a period of thirty years. It required the company to keep the surface of the streets inside its rails and for two feet four inches on either side in good order and repair and free and clear from all snow, ice, dirt and filth. In case of repaving, the materials were to be furnished by the city. The rate of fare, except for chartered cars, was limited to five cents in any one car or on any one route. The term of this franchise, with various extensions that had been granted in the meantime, was extended by an ordinance approved November 14, 1879, to cover a period of thirty years from that date.[2] In addition to the Detroit City Railway Company, which was organized by the grantees of the original franchise, there were several other companies incorporated from time to time which received franchises from the city. The early franchises on the so-called five-cent lines, however, all of them originally granted for a period of thirty years, were renewed long before the expiration of the original period, so that most of them were due to expire in 1909, 1910 and 1915. Under an ordinance passed over the Mayor's veto January 4, 1887, one of the companies was required to pay a tax on its gross receipts amounting to one and one-half per cent from December 31, 1896, and two per cent thereafter until the expiration of its franchise.[3] This tax, however, was to be in lieu of all taxes, license fees and charges of any kind against the property, capital stock, rights and franchises of the company, other than real estate taxes.

[1] Compiled Ordinances, 1904, p. 290. [2] *Ibid.*, p. 298. [3] *Ibid.*, p. 348.

By another ordinance approved January 3, 1889, this company was authorized to extend its lines and at the same time was required to sell what are now known as "workingmen's tickets" at the rate of eight for twenty-five cents, to be used instead of cash fares at any time between 5:30 and 7 o'clock in the morning and between 5:15 and 6:15 o'clock in the afternoon.[1]

403. The Detroit Railway franchise of 1894; eight tickets for a quarter; paving obligations assumed by the city; company given option on all future extensions; right of purchase reserved.—Two or three years after the introduction of the workingman's tickets on the Fort Wayne and Elmwood Railway, Hazen S. Pingree was elected mayor of Detroit. The city soon found itself involved in a series of strenuously contested legal battles with the street railway companies. Turning to competition as a means of securing lower fares, Mayor Pingree secured the passage of an ordinance approved December 4, 1894, granting a franchise for a competing system of street railways.[2] This franchise was the earliest important low fare ordinance granted by any American city. Its provisions are therefore of unusual interest. To begin with, the new company was relieved from practically all paving obligations. It was expressly stipulated in the ordinance that "all paving or repaving or repairing of pavement upon any of the streets upon which said grantees, their associates, successors or assigns, shall hereafter construct, maintain and operate a street railway shall be done wholly at the expense of the City of Detroit, both within and without the rails of said tracks; and after being paved or repaved by the said city the same shall be maintained and kept in repair by the said city of Detroit." It was provided, however, that the grantees should not disturb the pavement or its foundation except with the permission of the board of public works, and that in such cases they were to pay the city the cost of supervising the work and of repairing and replacing the pavement removed. They were also to pay the cost of maintaining it to the satisfaction of the city for a period of three years, or until the street or trackway was repaved if such repaving took place before the expiration of the three-year period. The grantees were also required to replace the paving in and about their

[1] Compiled Ordinances, *already cited*, p. 351. [2] *Ibid.*, p. 356.

tracks in streets already paved at the time of the original construction of the road. It was also provided that on unpaved streets at the time of the construction of their tracks, the grantees were to excavate seven inches below the underside of the cross-ties and the city was to put in at its own expense the six inches of concrete required by the city ordinance as a foundation for the ties to rest upon. It was reserved to the common council, however, to decide whether or not the space between the tracks on unpaved streets should be ordered paved at the city's expense at the time of the construction of the tracks. In other words, the city assumed all responsibility for laying pavements originally, including the foundation for the car tracks on unpaved streets. The city also assumed the responsibility for the maintenance, repair and renewal of pavements. The only thing required of the grantees in this connection was to restore pavements torn up by them and keep them in repair for a limited time. The ordinance provided that the gauge of all tracks should be 4 feet 8½ inches, and that the space between double tracks should be 4 feet and 10 inches. Girder grooved rails of not less than 77½ pounds weight to the yard were to be used. The construction of the tracks was to be done under the supervision of the board of public works. The city was to keep the pavement clean, except that the grantees were required to remove snow and ice at their own expense.

The railways constructed under this ordinance were to be operated by the overhead trolley system. All poles within two miles of the city hall were to be of iron. The city reserved the right to require the grantees to use any suitable poles already erected in the streets for carrying their wires. The city also reserved the right to remove the grantee's poles whenever it desired to erect poles of its own for carrying electric wires in the locations occupied by the poles of the grantees.

It was made the duty of the grantees "to provide cars of modern design for service and comfort, heated, lighted, vestibuled and carrying an approved life-guard, numbered and carrying signboards by day and colored signal lights after sunset, to distinguish their respective routes." It was stipulated that the cars "shall be kept clean inside and out, and shall not be overcrowded." Each car was to be in charge of

a uniformed conductor who was to pronounce clearly the names of cross streets as the car approached them. It was stipulated that "passengers shall not enter or leave or attempt to enter or leave the cars when in motion, and conductors are hereby authorized to make all reasonable efforts to prevent them from doing so, provided, however, that this shall not be construed to justify the use of or the threat to use physical force on the part of the conductor."

The cars were to have the right of way on the tracks, and any driver of a vehicle refusing to turn out so as to leave the track unobstructed, would be liable to a fine of not more than $10, and in default of payment might be imprisoned in the Detroit House of Correction not to exceed ten days. Permits for moving buildings or large and bulky articles where such moving would interfere with the operation of the cars or with the overhead equipment of the railway were not to be issued except with the written consent of the grantees or on the authority of a resolution adopted by the common council and approved by the mayor. Moreover, all the expenses and damages caused by the removal and disturbance of the wires, poles and premises of the railway in connection with the moving of any such building or other article were to be paid by the mover. The right was reserved to the mayor to direct the temporary cessation of the running of cars during parades or processions of a public nature, and the fire department was authorized to stop the cars in case of conflagration when deemed expedient.

The grantees were required to employ "careful, sober and prudent" agents, conductors and motormen to take charge of their cars. All conductors and motormen were to be citizens of the United States and voters of the state of Michigan, and ten hours' work was to constitute for them a day's employment to be completed inside of twelve consecutive hours. The rate of speed of the cars was limited to an average of fifteen miles an hour for the whole length of any particular route.

The rate of cash fare was fixed at five cents and the payment of this fare would entitle the passenger to a transfer check good for a ride over any other line or route operated by the grantees or their successors, if presented on the next regular car of such other route within fifteen minutes after

the passenger had left the car upon which he had paid his fare. Tickets were to be kept on sale on all cars in service between 5:45 o'clock in the morning and 8 o'clock in the evening in strips or packages of eight tickets for twenty-five cents and from eight o'clock in the evening until 5:45 in the morning in packages of six tickets for twenty-five cents. Passengers presenting tickets of one kind or the other, according to the hour of the day, would be entitled to the same privileges as if they had paid cash fares. Children under six years of age accompanied by parent or guardian were to ride free. It was expressly stipulated that these rates of fare should not be reduced during the period of the franchise without the consent of the grantees. It was also expressly stipulated that the rates specified in the ordinance should not be exceeded during the period of the grant "either with or without the consent of the city," and that any attempt on the part of the grantees to collect fares in excess of these rates should invalidate all the provisions of the ordinance, and all the rights of the grantees to construct or operate railways in the streets of the city should thereupon "cease and become null and void."

The franchise was granted for a period of thirty years ending December 4, 1924, and the grantees were authorized to organize a corporation under the laws of the state of Michigan, and transfer to it the powers and privileges conferred by this ordinance, without further action by the common council. It was stipulated that the company should pay taxes on its real estate and on its personal property, including its rolling stock, track, wires, poles and motors, the same as any individual, but that in consideration of the reduced rates fixed by this ordinance, the franchise and earnings of the road should not in any manner be subject to taxation. The company was to execute a bond in the penal sum of $100,000 to indemnify the city against claims for damages resulting from the exercise of this franchise. It was expressly provided, however, that the company should not be held liable for damages "occasioned by reason of the defective construction or condition of the street pavements, which it is the duty of said City of Detroit to construct and maintain in good condition, under the terms of this grant, or by virtue of its public duty as a municipality." In order, how-

ever, to escape from liability for defects in the pavement in and about the tracks, the company was required to give notice to the board of public works of the existence of such defects, at some time between 8 o'clock in the morning and 4 o'clock in the afternoon on any day when the office of the board was open for public business. Until such notice had been given, and for a period of six hours thereafter, the company was to be responsible for damages resulting from neglected pavements. The company was required to issue and accept free transfer tickets to and from other street railways at the intersection of the lines, whenever the other companies were willing to grant similar privileges to the public. The common council reserved the right to make by ordinance reasonable rules from time to time for the protection of the interests, safety, welfare or accommodation of the public, and to regulate the running of cars. A minimum headway of ten minutes was required, however, for all of the company's routes except between the hours of 10 o'clock in the evening and 5 o'clock in the morning.

In case the company violated any of the terms or conditions of the ordinance, the city would have the right to repeal, alter or amend it. But written notice of the violation was to be served on the company thirty days before action was taken by the council and no action could be taken unless the violation complained of continued during that period. In case of dispute in regard to the violation, the question was to be determined by the courts in any proper suit or other proceeding and after final determination against the company, there was to be a further allowance of thirty days within which it must comply with the terms of the ordinance as construed by the courts.

The grantees under this ordinance were given the right to construct and operate street railway lines on such additional streets or routes as the common council might designate. The stipulation was that the grantees should have the first right to construct additional lines, on condition that they should signify their acceptance of the route or routes laid out by the council, by written instrument filed with the city clerk thirty days after the routes had been designated and due notice given to the grantees. All additional lines accepted by the company were to be constructed and operated

under the provisions of this franchise. This first right to the streets was not to extend, however, to any additional lines that might be granted to the Fort Wayne and Belle Isle Railway Company. The procedure, in case the council decided upon the establishment of an extension or a new route as being necessary for the public convenience and accomodation, was prescribed in detail. The terms and conditions of construction and operation of the designated route were to be fixed, and then the route was to be offered to the grantees under this ordinance. If accepted within thirty days, the route was to be constructed and put into operation within one year thereafter. If, however, the grantees failed to accept the extension, the city would have the right to grant the franchise for the extension to any other party on the same terms and conditions upon which it had been previously offered to the grantees under this ordinance. In case a new company secured an extension franchise, the city would have authority to authorize the new company to connect its tracks with the tracks of the grantees at some point within one-half mile of the city hall and operate its cars over the latter tracks within that limit, on condition that the new company should make a reasonable compensation for a joint ownership of the tracks and other fixtures. The purpose of this provision was to make the area within a radius of one-half mile of the city hall "free territory" for existing routes or for routes thereafter to be created. In case the new company and the grantees were unable to agree upon the amount of the compensation, the question was to be submitted to arbitration, each party appointing one arbitrator and the two so chosen selecting a third, but in case the arbitration should be prolonged to the inconvenience of the public, the common council would have the right to permit the new party to enter upon the joint use of the tracks and appurtenances in case such party filed an approved bond in the office of the city controller. The anxiety with which Mayor Pingree and his common council favored this low-fare enterprise is shown by an express provision to the effect that if any portions of the ordinance should be held invalid by the courts, such invalidity should not affect the other portions of the agreement.

The company was expressly required to treat all passengers

[illegible]

[illegible] was to be put [illegible] and the grantees were [illegible] sum of $50,000 to be forfeited in [illegible] road within the time specified.

Such were the terms of the famous Pingree three-cent ordinance for the lines of the so-called Detroit Railway system. Under this ordinance, by virtue of the original grant and certain additional grants made from time to time, a railway consisting of about twenty miles of single track and

twenty miles more of double track was constructed and has been in operation for about fifteen years. These lines were consolidated a few years after their construction with all the other lines of street railway in Detroit under the ownership of the Detroit United Railway, which in 1909 operated upwards of 742 miles of track, of which 167 miles were within the city limits and about 29 miles more were operated in connection with the city service.[1]

404. Confusion in Detroit street railway operation; controversy over paving; devotion of people to low fare franchise.—There are many factors of confusion in the Detroit street railway situation. In the first place, the present company is operating the city lines as the most lucrative and important part of a great interurban system, while the mileage of the company's tracks outside of the city is vastly greater than the mileage inside. The earning power of the city lines constitutes the backbone of the company's entire system. While only 26.35% of the company's trackage is operated as "city lines," the earnings of this portion was 88.35 % of the company's total earnings in 1908. This situation renders the control of the company by local ordinance, and negotiations with the company for an adjustment of its local franchise rights more difficult than they would otherwise be. In the second place, the company is operating within the city under many different franchises expired or expiring at many different times. In the third place, while the lines are operated by one company, there are two systems of fares, each of which is rendered complex by the fact that the rates differ with the time of day. In the fourth place, the company's paving obligations are not uniform. On the five-cent lines responsibility for paving in and about the tracks rests with the company. On the three-cent lines the city voluntarily assumed this responsibility even to the extent of laying and maintaining the foundations of the roadbed. In the fifth place, there are many complications in the system of taxation as applied to the company's property. On some lines the company pays a tax of two per cent on its gross receipts; on others, one per cent. On some of the lines, its personal property is subject to taxation for state and county purposes, but not for city

[1] *See* "Committee of Fifty Reports on Investigation of Street Railway Question," adopted December 6, 1909, pp. 66, 74.

purposes, while on other lines its tangible personal property is subject to taxation for city purposes, while its franchise is taxed for state and county purposes only. The company's real estate is subject to taxation for all purposes.

Detroit's experience has clearly shown that Mayor Pingree made too many concessions in the "Detroit Railway" franchise for the sake of lower fares. The service on the three-cent lines has for many years been shockingly inadequate. Early in 1910 a resolution was introduced into the common council having for its purpose the revocation of the franchise on the three-cent lines. The inadequacy of the car service was set up as the ground for the proposed forfeiture. In a letter to the common council relative to this pending resolution, the president of the company said:[1]

"We beg to call your attention to the fact that in said ordinance the city of Detroit is under contract to do the surface paving and to maintain the foundations under the tracks on the line in question. And we respectfully advise you that this obligation on the part of the city has been and is being wholly disregarded. As a consequence of this neglect on the part of the city we are not only not able to operate over these foundations a heavier type of cars, such as are used on some other lines in Detroit, but are confined to the lighter cars now used; and not that alone, but we are suffering much financial loss as the result of the conditions of which we complain. Despite the fact that the attention of the proper city officials has heretofore on many occasions been called to the bad conditions of these foundations, their maintenance has been so extremely meagre as to have brought them into a state which makes it impossible to operate over them except at a great loss to ourselves and with much inconvenience to the public."

The company's complaint seems to be borne out by the report of the Committee of Fifty, which shows that the city expended from 1894 to June 30, 1909, a total of $285,212.80 on the pavements and foundations in and about the tracks of the three-cent lines, while the commissioner of public works under date of October 5, 1909, officially estimated that the approximate cost of renewing the foundations under these tracks and of doing the necessary paving in and about them, would amount to $1,047,820.[2] The commissioner estimated that if this entire amount were expended and the improvements carried through, the cost to the city of maintaining the pavement would be about $25,000 a year.

The devotion of the people of Detroit to the Pingree three-

[1] Published in the *Detroit News*, April 22, 1910.
[2] "Committee of Fifty Reports," *already cited*, pp. 120, 121.

cent lines, in spite of the defects of the ordinance under which they are operated, was conclusively shown at the November election in 1906, when a new franchise settlement containing many attractive features was rejected by an overwhelming vote of the electors, largely on the ground that it would supersede the three-cent fare and that, though conceding uniform and comparatively low rates on the street railway system as a whole, it would slightly increase the average fare paid on the three-cent lines. The so-called "Codd-Hutchins" ordinance had been worked out to the satisfaction of Mayor Codd and the Detroit United Railway, and the franchise was defeated at the polls in spite of the active and eager co-operation of the city administration and the company. The salient features of the proposed franchise are of considerable interest as showing what the people of Detroit would reject rather than give up the three-cent fares on a portion of the street railway lines. Under the proposed ordinance a uniform city franchise was to be accepted by the company and all rights within the city limits were to expire at one time, December 4, 1924. Uniform rates of fare and universal transfers on all lines within the city limits as they existed in 1906 were to be established as follows:

Cash fare, five cents.
Tickets good at all hours, six for twenty-five cents.
Tickets good between 5 A.M. and 8 A.M. and between 4.30 P.M. and 6.30 P.M., ten for twenty-five cents.
Each passenger to be entitled to one transfer upon a cash fare or a ticket, but not to a transfer upon a transfer.

The company was to undertake the immediate construction of about twenty-three miles of new track for loop lines, double tracking and much needed extensions.

The company was to assume the burden of paving and keeping the pavement in repair between the rails and the tracks and for one foot on either side on all its lines.

The company was to pay a two per cent gross receipts tax on all its city business and the regular property tax on its real estate, but all its personal property, including its tracks, wires, cars and other equipment, was to be exempt from the general property tax for city purposes.

The city was to have the right to purchase the company's plant and equipment in 1924 at a price to be fixed by arbitra-

tion based upon the value of the property as a going concern for street railway purposes.[1]

The company spent large sums of money in a so-called "educational campaign" by the use of advertising space in all the newspapers, seeking to induce the people to accept this franchise. The reasons for defeating the franchise as summarized by *Civic News*, the official journal of the Detroit Municipal League, were as follows:[2]

"(1). Because by its marked discrimination in rates in favor of certain classes of people and certain hours it would tend to congest traffic during five hours and impair the service at all times.

"(2) Because the Detroit United Railway is spending enormous sums of money to get this franchise and the Mayor of the city is taking the company's side of the argument.

"(3) Because it does not provide for a sufficient guaranty of the construction of the proposed extensions.

"(4) Because while making a specious promise of future extensions from time to time, the string attached to the promise makes it practically worthless.

"(5) Because while the Company has thrown its books open to an expert employed by a committee organized for the purpose of inducing the people to accept the franchise, the franchise itself contains no provision for publicity of accounts, and would therefore leave the city just as much in the dark as it is now in any future negotiations with the Company.

"(6) Because the provisions with reference to purchase by the city in 1924 are dubious and inadequate, and might necessitate the payment of three or four times the actual cost of reproducing the property.

"(7) Because the franchise makes no workable provision for forfeiture in case of the violation of the contract by the Company, there being a provision which would practically block every effort of the city to amend or repeal the franchise, no matter how flagrant the Company's violation of its contract might be.

"(8) Because it binds the city to tolerate the overhead trolley wire system of electricity for eighteen years to come, no matter what new methods may be invented in the meantime."

The experience of Detroit demonstrates that the practice of granting lower fares in the rush hours by means of so-called "working men's tickets" tends to congest traffic and to render good service more difficult at the times when under normal conditions and without extra stimulation it is already most difficult. The Committee of Fifty in its report to the mayor states that having secured information in regard to street railway operating statistics from Buffalo,

[1] For a complete analysis of this franchise *see Civic News*, issue of September 22, 1906.

[2] Issue of September 29, 1906.

Cincinnati, Chicago, Denver, Minneapolis, St. Paul, New Orleans, Pittsburgh and Philadelphia, it found that the variation of power used in Detroit during the period from 5 to 6 o'clock in the afternoon was greatly in excess of the variation at the same hour in any of the other cities.[1]

"This is owing to the fact," said the Committee, "that the eight for a quarter, or so-called workingmen's tickets, may be used during this hour."

405. Graduated rates of fare; universal transfers; extensions in built-up sections; joint use of tracks by interurban roads—Columbus, Ohio.—The principal street railways of Columbus are operated under a renewal ordinance granted to the Columbus Railway Company in 1901.[2] In this ordinance it was recited that the several lines of street railway owned by the grantee were held and operated "under the authority of ordinances passed at various times, and for various periods, and containing various and inconsistent conditions . . . . and so limiting the franchises thereunder granted that they expire at different times up to and including the year 1917." It was also recited as being an object of desire that all the company's lines should be operated "as one complete and entire system, thereby better accommodating the public and facilitating the running of cars;" that the company's franchise rights to maintain its tracks in the various streets and avenues in the city should be made to expire at one and the same date; that the company's burdens in the way of payment of the cost of street cleaning, sprinkling, paving and repairs should be uniform and that the rates of fare should be reduced, made uniform and be supplemented by a general system of transfers.

The right to maintain and operate its lines of railway upon the streets and avenues enumerated in the ordinance was granted to the company for a period of twenty-five years, subject to the terms and conditions prescribed in the ordinance, and also subject to the requirements of the general ordinances of the city. The company was required to make connection between its tracks and the tracks it had purchased from the Columbus Central Railway Company. The company was forbidden to make any change in the car routes being

[1] "Committee of Fifty Reports," *already cited*, p. 7.
[2] Ordinance No. 17,801, approved by the Mayor February 6, 1901.

operated by it at the date of this ordinance, "unless such change shall be first approved by resolution of the City Council." The company was required to pay for cleaning, sweeping and sprinkling that portion of the public way occupied by its tracks and for one foot on the outside of its outer rails at the same rate and in the same manner as required of the abutting property owners for the residue of the public ways in which the tracks were laid. If at any time the city council should order the improvement of the roadway of any street occupied by the company's tracks, then the company was bound to pave at its own expense a similar portion of the street with the same material used for the rest of the street. In cases where a pavement had already been laid and an assessment had been made for it, the company was to pay to the city its proportion of the assessment. The pavements laid by the company were to be kept in repair at its expense under the direction and supervision of the public officials. Whenever tracks were being put down on unimproved streets, the company was to grade the street from curb to curb, level with the track, at its own expense. The city was to be indemnified from all damages, lawful claims and demands for injuries to persons and property growing out of the exercise of the franchise, or out of the company's failure to construct and keep in repair the portion of the pavement for which it was made responsible. The company was authorized at its own cost to make defense against any such actions either in its own name or in the name of the city. The city reserved the right temporarily to remove or obstruct any of the company's tracks, or authorize such removal or obstruction, whenever necessary in laying or repairing water pipes, gas pipes, sewers, drains, gutters or cisterns, and to use hose or other apparatus necessary in putting out fires or in carrying on any other public work, but the running of cars was not to be disturbed where it could be avoided. The company was required to conform to reasonable rules and regulations adopted from time to time by the city prescribing the rate of speed of its cars. It was prescribed that warning should be given by a gong, or otherwise, to notify persons of immediate or approaching danger when the cars were about to stop, and, if reasonable cause existed, when the cars were in motion. No car was to be started while a passenger was in

the act of getting on or off. Cars running in the same direction were forbidden to approach nearer to each other than a hundred feet, unless from unavoidable necessity and at switches or turnouts. Gongs were to be sounded on all cars approaching each other from opposite directions, and at corners where the cars were to turn from one street into another. The city was not to be liable to the company for damages arising from the breaking or overflow of water from any sewer or drain, or from the breaking of any water pipe or gas pipe by reason of any change in the street grades. The company was required to construct its tracks in such a way as properly to protect from damage all sewers, water pipes and gas or other pipes occupying the subsurface of the streets. In case of the removal of snow and ice from the tracks, the work was to be done in such a way as not to impede travel or render the street dangerous. Conductors were not to permit any lady or child to leave or enter the car while in motion. Conductors and motormen were required to keep a vigilant watch of teams, carriages, persons and obstructions upon or near the track, and at the first appearance of danger to give warning and stop the cars, if necessary to prevent accident. It was provided that the motorman should always be on the front platform while the car was in motion. The motive power authorized was electricity, or such other power except animal or steam power as should be acceptable to the city. The company was given the right to erect and maintain iron or wood poles, "painted and neat in appearance," wires, fixtures and conduits and all other appliances that in the opinion of the common council might be found necessary. After dark, cars were to be lighted and provided with signals. All cars were to be kept clean, and heated when the temperature was below 35 degrees Fahrenheit. Cars were not to be allowed to remain standing for passengers or for any other purpose so as to impede other vehicles. It was expressly provided that "no car or cars shall be used on such railroad if worn out, broken, or so constructed, or kept in such a condition as to imperil the lives, limbs or health of the passengers." The city was authorized at any time to require all trolley wires or other electric wires in the principal business district to be placed underground. Prior to the erection or placing of wires, conduits or other appliances or appur-

[illegible]

[illegible] the new [illegible] paying into [illegible] the cost of [illegible] and maintenance of a space of six feet [illegible] so [illegible] paid for by party owners' consents, the expense of paving and repairing the pavement, the pro rata amount of taxes and assessments paid on the tracks jointly used, and the cost of power used in operating interurban cars. It was provided that if the right to the joint use of tracks should be granted by the city, and if the terms of compensation could not be agreed upon between the Columbus Railway Company and the new grantee within sixty days after the grant had been made, the terms of compensation were to be submitted to arbitration, each company selecting one arbitrator and the two so appointed selecting a third. In the absence of fraud, accident or mistake of law or fact, the decision of the arbitrators was to be conclusive on both parties, but neither the arbitration nor any appeal from it was to be permitted to delay the joint use and occupation granted by the city, if the new company gave sufficient suretion that it would pay the compensation awarded by the arbitrators. It was provided, however, that no interurban cars operated over this company's tracks by virtue of the

city's right to authorize joint use should be run more frequently than one car each way every thirty minutes. The company was empowered to make contracts or traffic arrangements for the use of its tracks by interurban cars of a different gauge from that of the company's own cars and with the city's consent was empowered to permit the laying and use of a third rail for this purpose. The company was not to permit such joint use or the laying of such third rail, however, except over routes necessary to enable the interurban cars to reach and return from the tracks known as the interurban loop. Interurban cars were defined as meaning cars operated at regular intervals between the city of Columbus and some other city or village at least ten miles distant from the Columbus city limits at the point of entrance. Neither this company, nor any other company which might thereafter get the right to use this company's tracks, was authorized to move passenger cars in trains of more than three cars each, including the motor car. Freight cars, except for the transfer of materials to be used by the company in the construction of repairs and extensions, were not to be moved over any of the company's tracks except upon streets which might thereafter be designated by ordinances granting such permission. It was stipulated that a motorman should be stationed on the front platform of each motor car, and that there should be a conductor on each car whose duty "shall be to collect fares and to look out for the safety and comfort of passengers."

It was stipulated that the company "shall, as rapidly as the requirements of its railroad system and the efficient service of the public demand, during the life of this grant, expend not less than $1,000,000 in extensions and betterments, and shall, at all times during the life of this franchise, furnish upon all its lines efficient and adequate service and a sufficient number of first-class, commodious cars for the accommodation of its patrons." Power was reserved to the city council by ordinance to "require such reasonable extensions of the lines operated by said company as may be necessary for the efficient operation of such railroad and for the convenience of the public, whenever along the line of any such proposed extension and between parallel lines four hundred feet distant on each side thereof there shall

be, when such extension is ordered, not less than one hundred and fifty separate buildings, used and occupied as dwellings, per mile, or in like proportion for any less distance." The company could not be required, however, to make more than one mile of extensions within one calendar year. The franchise rights on all such extensions were to expire at the end of the twenty-five year period of the main grant. In making extensions, or in relaying tracks on paved streets, the company was required to use grooved or other modern and improved rails of a weight and pattern to be approved by the board of public works. The rails were to be laid upon foundations of concrete or other material and according to plans approved by this board. Whenever any unpaved street occupied by the company's tracks was to be paved, it was required that the company should relay its track in the manner just described. At all times the company was to keep on deposit with the city the sum of $1,000, as an emergency fund against which the city might draw for the cost of any repairs which the company had neglected to make after due notice and reasonable opportunity. In case of the withdrawal of any money from this fund the company was at once to replace the amount withdrawn so as to keep the full sum of $1,000 on deposit at all times. At the expiration of the grant, any sum remaining in this fund and due the company, was to be returned to it.

One section of this ordinance stipulated that its provisions should extend to certain streets in which the company claimed perpetual franchises on condition that such franchises should be declared by the courts not to be franchises in perpetuity. It was expressly provided that nothing in this ordinance should be construed as a concession by the city of the validity of the company's claim to any perpetual rights in the streets mentioned.

Under this franchise the company was authorized to charge uniform rates of fare within the city limits as follows:

For a single cash fare, five cents.

For tickets in packages of seven, twenty-five cents, until the company's annual gross receipts on all lines operated by it within the city amounted to $1,750,000; and thereafter, tickets in packages of eight, twenty-five cents; all tickets to be good for use from the time the regular cars started in the morning until the regular cars quit running at or shortly after midnight.

For single fare on the "owl" cars from midnight or shortly thereafter until the regular cars started in the morning, during the first five years of the franchise period, ten cents, and thereafter five cents.

Children under six years of age, attended by parent or other person, to be carried free; children over six and under ten years of age to be carried for three cents each.

Tickets to be kept on sale at the company's principal office during business hours, and at all times by conductors on the regular cars.

A transfer to be issued on demand by the passenger at the time of paying a cash fare or presenting a ticket, such transfer to be good for one continuous passage within the city limits, or on any other line owned or operated by the company connecting with, diverging from, or crossing the line on which the transfer was issued, if presented within fifteen minutes after the time designated by the punch mark on the transfer slip; the time so designated to be "a reasonable arriving time of car at any one of the transfer points of the line by which such transfer was issued."

No free transportation to be furnished except to officers and employees of the company, and, when permitted by law, to policemen and firemen of the city in uniform.

A provision was also inserted in the ordinance looking to the exchange of transfers between this company and other street railway companies operating in the city. It was stipulated that upon the payment of a five cent cash fare, a transfer should be issued, good on the connecting lines of any other company which might be required by the city to accept such transfer, and that this company should in like manner receive in lieu of fares transfer slips issued by such other company. It was provided that the receipts from passengers purchasing inter-company transfers should be equally divided between the companies.

A minimum headway for the cars on the company's different lines between 5:30 in the morning and midnight, ranging from six minutes to fifteen minutes, was prescribed. It was also provided that on High street, and on three other lines, cars should be operated once an hour between midnight and 5:30 A. M.

One section of this ordinance expressly provided that upon the expiration of the twenty-five-year franchise renewal period, unless a further renewal was granted by the city, the company should remove all its tracks, wires and other appliances from the streets and leave the portion of each street occupied by its tracks in good condition, corresponding in finish and material with the remainder of the street.

The franchise just described was granted while Dr. Washington Gladden, the celebrated civic and social reformer, was a member of the Columbus city council. As long ago as 1906 the gross receipts of the company had nearly reached the $1,750,000 limit at which the rate of fare was to be re-

duced to eight tickets for a quarter. The company now operates lines of the Columbus Market Street Railway Company under lease, and has provided for an exchange of transfers. For some reason the reported earnings of the old lines have not increased as rapidly as formerly, and the citizens of Columbus are not yet riding on tickets purchased at the rate of eight for twenty-five cents.

406. Old grants relinquished; all franchise rights to expire on fixed date; Indianapolis settlement of 1899. —On March 3, 1899, an emergency street railway act became law in Indiana authorizing the city of Indianapolis to enter into a contract to define the terms upon which the local street railway company should exercise its franchise.[1] In accordance with the provisions of this act, a contract was entered into by the Indianapolis board of public works with the Indianapolis Street Railway Company dated April 6, 1899, and ratified by ordinance of the common council two days later.[2] By this contract the various streets upon which railways could be maintained were enumerated in detail. It was stipulated that the company should not have the right to build or operate a line upon any of the streets of the city except those specifically named in this agreement until permission to do so had been granted by the common council. Similar consent was required before an existing line could be extended, and all future extensions and new lines were to be subject to the terms and conditions of this contract. It was specifically declared that any suburban lines that might be constructed or maintained by the company in districts afterwards annexed to the city should be subject, from the date of their inclusion within the city, to this contract. The period of the franchise was fixed at thirty-four years, and it was stipulated that all franchises acquired from suburban authorities in districts annexed to the city prior to 1933, should expire absolutely in that year with the expiration of the main franchise. It was also stipulated that any line or part of a line of street railway constructed by the company might be discontinued only with the consent of the board of public works. In case of such discontinuance, the company was to restore the street to good condition. The company was required to surrender

[1] Acts of Indiana, 1899, p. 260; *see*, "Laws and Ordinances, City of Indianapolis Revision of 1904," p. 176.
[2] Laws and Ordinances, p. 1040.

absolutely to the city all franchises and rights to the use of the streets and public places which the company had previously held or claimed within the corporate limits of the city. This was to include specifically all the rights of the Citizens' Street Railroad Company and the City Railway Company. There had been a dispute in regard to the franchises of the Citizens' Street Railroad Company. The city claimed that the company's franchises would expire January 18, 1901, while the company claimed that its franchises were perpetual. The effect of the contract with the Indianapolis Street Railway Company was to procure the surrender of all prior franchises, whatever they might be worth, and the acceptance of the terms and conditions of the contract and the absolute expiration of all franchise rights at the end of thirty-four years.

The surrender of the prior franchises was to be effected within sixty days after the ratification of this contract, except that time lost by injunction or other legal proceeding "prosecuted without collusion and diligently and in good faith defended" was to be added to the sixty days allowed. In case the company failed to carry out this part of the agreement, the contract was to be void, and all rights granted by the city to the Indianapolis Street Railway Company under it were to be "forfeited without any process of law," and the city was to have the right forcibly to expel the company and its employees from the streets, and remove its cars and other appliances, and the board of public works might under such conditions enter into a new contract with some other company and grant a franchise to it. It was stipulated, however, that the surrender of the rights of the Citizens' Street Railroad Company and the City Railway Company should not impair the rights of creditors or the liens or incumbrances held by them. Indeed, there was a provision in the law under which this contract was made, to the effect that "all rights of creditors and liabilities for damages and all liens or incumbrances upon the properties or franchises sold or transferred, pursuant hereto, shall continue unimpaired, and may be enforced against such property and franchises as if such sale or transfer had not been made." However, the new company expressly bound itself and its successor not to execute any mortgage or create any

other lien to secure bonds or other indebtedness which would mature after the date set for the new contract. It was stipulated that if any such lien should be created all the company's rights under the contract should immediately cease, and the company should at once yield peaceable possession of all the streets occupied by its railway system. It was expressly agreed between the parties that the limitation of time in the contract was one of the chief considerations of the grant, and the company pledged itself and its successors to the following course of action at the expiration of the period:

"It will peacefully yield possession of every part of every street, avenue, alley and public place in said city then occupied by any of its lines of street railway and cease the operation of its said street railway plant or system and every part thereof, and from thence forward will make no claim of any kind to exercise any right whatever under the grant herein made or under any charter or corporate right, and any rights which might be claimed by said company, party of the second part or its successors or assigns, to hold beyond said period of time under the statute under which it was incorporated or under any other enactment prior to this date, or which might have been derived from any other source, are herein and hereby expressly waived."

The company also agreed to cause the Sugar Flat Gravel Road Company to surrender to the board of commissioners of Marion county the turnpike franchise on the gravel road leading north from Central avenue in the city of Indianapolis.

407. Six tickets for a quarter; motive power subject to change; emergency fund for city's protection—Indianapolis. —The rates of fare to be charged by the company were very carefully fixed in this franchise. For each passenger more than five years of age who paid a cash fare, the rate was to be five cents, which would entitle him to ride to the end of the line on which he had taken passage or to receive a transfer ticket without additional charge that would entitle him to take passage on any intersecting line. It was stipulated, however, that a transfer passenger must board the car upon which he desired to use the transfer within one square of the point of intersection of the two lines, and must take the first car leaving the point of intersection after his arrival there. If, however, the two lines ran upon the same track for a distance, the passenger was to have the option of transferring at the point of intersection or at the point of diversion. Tickets were to be kept constantly on sale on all cars at the

rate of six for twenty-five cents, or twenty-five for one dollar. A ticket tendered in place of cash fare would entitle a passenger to all the privileges of those paying cash. A special provision was put in this contract to the effect that if a conductor for any reason should fail to deliver tickets to a passenger on demand, then the passenger would not be compelled to pay a cash fare, but should be carried to his destination without charge and with the right of transfer, unless the tickets demanded by him were supplied before he got to the end of his journey.

The company's cars were to be operated by electric power only, but the city reserved the right to require "that such methods of propulsion shall at any time be introduced as will at all times during said entire period insure to the citizens of said city first-class and efficient street railway service." It was declared to be the intention of the contracting parties that if by reason of inventions and discoveries during the period some other improved power should come into use and be adopted in other cities of substantially the same size as Indianapolis, the installation of such improved power might be required by the board of public works and the common council. The obligation to pave the space between the rails, the tracks and for a distance of eighteen inches on either side, and to keep such space in repair under specifications to be provided by the board of public works, and to repave such space when required by the city, was imposed upon the company. This paving obligation included the repair of the space in and about the tracks on city bridges or culverts.

The company was to deposit in the city treasury an emergency fund of $1,000 to be drawn upon by the board of public works for the immediate repair of any dangerous defect found to exist in that portion of the streets for which the company was responsible. This fund was to be replenished from time to time by the company so as to be kept up to the full amount of $1,000. Whenever the board of public works ordered the improvement of a street or a portion of a street in which the company had tracks, the company agreed that it would on request of the board proceed to improve the portion of the street surface for which it was responsible with the same material and under the same specifications as those used by the city's contractor for the remainder of the

street. The company agreed to work with the same diligence shown by the contractor so that the improvement to be made by the company would be completed with the improvement of the rest of the street. By agreement with the board of public works, however, the company might be allowed to use different material from that used on the balance of the street. In case the company's work was not completed within twenty days after the improvement of the other part of the street had been completed, then the board of public works would be authorized to go ahead with the work at the company's expense.

408. The Indianapolis plan for future extensions of the street railway lines.—One of the most interesting features of this contract is the provision for the extension of the company's lines on the initiative of the board of public works. It was agreed between the parties that the city might require the construction of reasonable extensions or such new lines as might be necessary for the efficient operation of the railway and "for the convenience of the public." Provision was made for immediate extension to certain parks. The procedure by which the construction of extensions or new lines was to be enforced, was as follows:

"Whenever it shall appear to the said Board of Public Works, either from the petition of persons residing in any part of said city or otherwise, that the public interests demand the extension of any line of street railway already in operation or the construction of a new line in and upon any streets, alleys, avenues or public places of said city, the said Board of Public Works shall cause written notice to be given to the President, Secretary, General Manager or Superintendent of the said company, requiring said company, by its representatives, to appear before said Board on a day certain to be named in said notice not less than five days after the service of such notice, and show cause why the proposed extension should not be made or such proposed new line should not be constructed. The said notice shall contain a description of the streets, alleys, avenues or public places on or through which said extension or new line is proposed to be made or constructed. On the day and at the time named in such notice said Board of Public Works shall give to the said company, party of the second part, if its representatives so desire, a full hearing on the question as to whether such proposed extension or the construction of such new line is necessary either for the efficient operation of such railway or for the convenience of the public, and may be reasonably required. If the said company, party of the second part, shall not appear before said board at the time named in the said notice, such Board may act upon such evidence or information as it may have from any source.

"If, after hearing the representatives of said company at the time

named in such notice, if any of such representatives appear, or if they do not appear, after advising itself from any other sources of information, it should appear to the said board that the best interests of the public require such extension to be made or such new line to be constructed, and that the same be reasonably required, it shall make an order requiring any such extension to be made or any such new line to be constructed, and in such order shall fix the time within which the said extension shall be made or such new line shall be constructed, which period of time so fixed shall in all cases be of sufficient length that the said company, party of the second part, by the exercise of reasonable diligence, may be able to make such extension or construct said new line within such time. The said board shall cause written notice of any such order to be given to the said company, and if the said company shall fail or refuse to make such extension or construct such new line within the time fixed by said order it shall forfeit to said city the sum of fifty dollars for each day that the completion of such extension or new line is delayed beyond said period."

409. Model franchise provisions for efficient service contained in the Indianapolis contract.—The city also reserved under the contract the right through the board of public works to exercise at all times reasonable control over the company, and over the operation, maintenance and construction of its lines for the purpose of securing efficient and first-class service, and it was stipulated that nothing contained in the contract was to be construed as abridging this right. The specific provisions of the contract relative to efficient service are so comprehensive and interesting that I quote Section 11 in full, as follows:

"The said party of the second part agrees and binds itself, its successors and assigns, to operate all its various lines of street railway in said city during the entire period for which this franchise is granted in such manner as to render to the public at all times first-class and efficient service; that its motive power shall at all times be ample and of the most approved kind; that its cars shall be of the best and most approved pattern, style and finish, at all times kept clean, well ventilated, provided with comfortable seats for passengers, and heated with safe and convenient appliances whenever the weather is such that the comfort of passengers requires the same, and lighted at night with electricity, or, subject to the approval of the said Board of Public Works, with other equally efficient light; that all such cars shall be kept in good repair, and shall at all times be so painted on the outside and decorated on the inside as to present an attractive appearance, and shall be repainted and redecorated from time to time as may be necessary to maintain such appearance; that each of such cars shall be provided with the most approved life guards and with a sufficient number of electric bells, connections and buttons or knobs so that passengers may, without inconvenience, by the use thereof notify the conductor having charge of any such car of their desire to leave the same at the proper crossing; that each of such cars shall have thereon the name of the line

or point of destination in letters of such size as shall be prescribed by the said Board of Public Works, so that the same may be readily discerned and read by persons of ordinary eyesight, and that at night each of such cars shall have displayed on the front end thereof the name of the line to which it belongs or its point of destination, which name or point shall be so illuminated or displayed, as shall be prescribed by said Board of Public Works, that it shall be readily and easily seen and read by persons of ordinary eyesight; that the tracks of said lines shall at all times be kept in repair, provided with the most modern and improved rails, of sufficient size and weight and in such condition that passengers riding in cars over the same shall suffer no discomfort or inconvenience by reason of such tracks or any part thereof being irregular, uneven or in any wise insufficient, and the right is reserved to the Board of Public Works of said city to order any needed repairs to said tracks or roadbed, or cars, or appliances, and the said company, party of the second part, agrees to comply with all such orders.

"It is also agreed by and between the parties hereto, that the said company, party of the second part, shall at all times during the period of this grant, run and operate upon and over each of its said lines a sufficient number of first-class and commodious passenger cars to accomodate the public.

"The intervals between the running of cars on the several lines aforesaid shall be so arranged and changed from time to time as may be necessary to accomodate public travel thereon. The Board of Public Works of said city shall at all times have the right, by appropriate order, to prescribe such reasonable regulations as will insure compliance with this provision.

"In case the said company, party of the second part, should fail to comply with any of the foregoing agreements and stipulations concerning the motive power, the kind of cars to be used, or the equipment, painting, decoration, heating, lighting or designating the same, or concerning alarm bells, life-guards, rails or roadbed, or any other stipulation contained herein concerning the operation, maintenance or construction of its lines of street railway, and the Board of Public Works shall by written notice, served on any officer of said company, require compliance with any such stipulation within a reasonable time therein fixed, and said company shall continue to fail and refuse, after any such period so fixed, to comply with any such provision or stipulation, then said company shall forfeit to said city the sum of fifty dollars for each day that it shall continue to violate any such provision or stipulation, which sum may be collected in a suit on the bond hereinafter required to be given by said company, or otherwise, as said Board of Public Works may elect. Provided, that nothing contained herein shall be construed as an attempt to in any wise abridge or restrict the power of the Common Council of said city to enact reasonable ordinances providing for the safety, comfort and convenience of the public travelling on lines of street railway in said city, also providing reasonable penalties for the violation thereof."

410. Liberal compensation; joint use of tracks for interurban lines; right of purchase reserved; terminal station required — Indianapolis.—As partial compensation for the franchise the company agreed to pay the city the sum of

$1,160,000 which was to be expended for public park purposes. This money was to be paid in annual instalments of $30,000 during the first twenty-seven years of the contract and $50,000 a year during the remaining seven years. In case the company should fail or refuse to pay any instalment within thirty days after it became due, then all the rights under the franchise were to be forfeited and all that portion of the entire sum of $1,160,000 remaining unpaid was to become due at once. These annual payments were to be in lieu of all license and special taxation that might thereafter be imposed, but were not to affect the company's liability to general taxation. For the purpose of improving the company's plant and service, it was required under this contract to spend not less than $1,000,000, and as much more as might be needed, "in buildings, equipment and machinery, in the purchase of new passenger cars and appliances therefor, and new rails of improved size and weight, and for other necessary materials and for the necessary labor." The company also agreed to lease to the city at the nominal rental of one dollar the property known as the Shelby-street barn, and to convey this property to the city free of cost before the expiration of the contract. The contract contained the usual provisions requiring the company to indemnify the city for damages growing out of the construction, maintenance and operation of the street railway system. The company's tracks were not to be elevated above the surface of the streets and were so to be laid as to be no unnecessary impediment to the ordinary use of the public thoroughfares. The location of existing poles, wires and fixtures might be changed by reasonable orders of the board of public works. The company was to take up and relay its tracks at its own expense when necessary in connection with the grading, repaving or repairing of the streets, the construction of sewers, the laying or repairing of water or gas pipes or any other public improvements. It was expressly provided, however, "that in all cases where tracks, poles, or other structures of the second party (the company) which are required to be taken up and relaid to enable water or gas pipes, conduits or other apparatus of any other person, corporation or company than the first party (the city) to be relaid or repaired, were laid or constructed before those of such person, company or cor-

poration, the entire expense of taking up and relaying the tracks, poles and structures of the party of the second part shall be borne by such other person, company or corporation."

It was provided that if necessary in the prosecution of any public work, the company's cars might be stopped temporarily by order of the board of public works, but the express obligation was laid upon the company to operate its lines continuously throughout the period of the franchise unless prevented "by act of God, accidents or other causes not reasonably preventable." The right to cut the company's wires in times of danger was reserved to the chief engineer of the fire department and the members of the board of public safety. The company's emergency wagons were authorized to run at such speed as might be necessary, giving warning of their approach by the ringing of bells and the sounding of gongs.

The company agreed to permit the use of its tracks by any authorized suburban or interurban railroad company from the corporate limits of the city, or from the nearest connecting point within the corporate limits, to some central point where passengers could be received and discharged. The right was reserved to the board of public works and the common council to establish this central point, and to designate the tracks to be used by the interurban companies in coming in and going out of the city. The use of the tracks was to be upon such conditions and under such regulations as might be prescribed by the city authorities, and the terms as to compensation and the question as to the furnishing of power and maintenance were to be determined by court action instituted by either of the parties concerned. In case the grantee under this contract should be unable to furnish power for the operation of the interurban or suburban cars over its tracks, then the interurban or suburban company was to have the right to construct and maintain feed and trolley wires on the poles and in the conduits of the grantee, but the right to use the grantee's tracks for the purpose of reaching a terminal in the central part of the city was reserved for only such suburban or interurban companies as had lines extending to a distance of at least six miles from the central terminal.

It was agreed by the parties to this contract that at any

time within two years and not later than one year before the expiration of the grant, the city should have the right to purchase the company's property "of every description whatever," but the value of the franchise was not to be included or considered in estimating the value of the property, "it being the intention of the parties hereto that the value of said property to be agreed upon shall be the actual value thereof independent of all franchise rights hereunder, the said city to pay nothing for franchise rights." In case the city and the company were unable to agree upon terms of purchase, then the city was authorized to file a complaint or petition in the circuit court of Marion County to secure a determination of the value of the property. At the expiration of the contract and upon tendering the company the amount of the valuation of the property as thus determined, the city would be authorized to take immediate possession and operate the street railroad for its own use and purposes.

It was also agreed, in addition to other penalties and forfeitures prescribed in the contract, that if the company should "habitually, continually or continuously" violate any of the provisions of the contract or of the lawful ordinances of the city relating to street railways, it would forfeit all its franchise rights in the streets. It was stipulated that the company should not use its lines and its cars for freight carriage, or traffic other than passenger traffic or the carriage of United States mail, without the consent of the board of public works. The company was authorized to haul its own or other cars containing supplies for its own use or for the city's use, but was not to have the right to haul baggage, freight or express cars or cars for advertising purposes only, except with the consent of the board of public works. It was also agreed that the company should not transfer its passengers by means of a transfer car or other station maintained in the street. A $25,000 bond was required of the company to insure its compliance with the terms of the contract. The legislative act of March 3, 1899, under which the city and the company negotiated their settlement, was made part of the agreement.

By a contract ratified by ordinance August 15, 1902, the city of Indianapolis granted a franchise substantially similar

to the one just described, but for additional routes, to the Indianapolis Traction and Terminal Company, which has since acquired control of the Indianapolis Street Railway Company, with the city's consent.[1] By this contract with the traction company, however, the latter was required to construct within eighteen months from the date of the grant and thereafter maintain a suitable and commodious passenger terminal at some point within a district specifically described. This terminal was to be accessible to all suburban and interurban street railway companies under reasonable regulations to be prescribed by the traction company "without discrimination in favor of, or against, or among or between any of said companies."

411. Joint use of tracks; twenty-five tickets for a dollar; extensions compulsory — Milwaukee.—A general renewal street railway franchise was granted to the Milwaukee Electric Railway and Light Company on January 2, 1900.[2] As in all other large cities, there had been many street railway franchises granted in Milwaukee prior to this general settlement. The most significant feature of these earlier franchises was a clause found in many of those passed subsequent to 1887, reserving to the city the right to authorize the joint use of tracks. In a franchise granted September 26, 1887, to the Milwaukee City Railway Company, the city reserved the right to grant to any other person or corporation the privilege of using the tracks and roadbed of the company on a portion of the route granted by this franchise, on condition that the person or corporation desiring to acquire such privilege should pay or guarantee the payment of a just and adequate compensation to be agreed upon with the company owning the tracks.[3] In case of failure to reach such an agreement within sixty days after the new company's written application for the privilege had been made, and a copy filed with the city clerk, then the compensation to be paid was to be submitted to arbitration. The city by its mayor was to appoint one person as arbitrator, the Milwaukee City Railway Company another, and the person or corporation applying for the privilege a third. It was stipulated that the three arbitrators so appointed "shall fix and determine the com-

[1] Laws and Ordinances, City of Indianapolis, *already cited*, p. 1064.
[2] General Ordinances of Milwaukee, 1906, p. 529.
[3] *Ibid.*, p. 392.

pensation, either in gross or payable in instalments, and under such conditions and regulations as the three persons so appointed shall prescribe, and as may be in their opinion just and proper for the use of the said tracks and roadbeds, due reference being always had in fixing the same to the amount and character of the use to be made thereof." In case either of the companies failed to appoint an arbitrator, the mayor was to make the appointment. The compensation as fixed and determined by a majority of the arbitrators was to be final and conclusive. The award was to prescribe the character and amount of the use to be made of the tracks and roadbed as well as the compensation to be paid, and was to be filed with the city clerk. The compensation fixed was to be subject to revision from time to time on similar application by either party, if the character or extent of the joint use of the roadbed should be changed.

The clause relative to joint use of tracks on certain streets as set forth in later franchises usually limited such joint use to three consecutive blocks in any one street.

In one of the franchises granted to the Milwaukee Cable Railway Company there was a provision forbidding the company at any time to pool or assign its interests or to consolidate with any other street railway company then having or thereafter obtaining a franchise in the city, unless with the consent of the common council.[1] The penalty for violation of this provision was the forfeiture of the franchise granted.

According to the general franchise ordinance of 1900, the rights conferred were to continue during the period ending December 31, 1934. It was further expressly provided that all prior rights, privileges and franchises which had been conferred upon the company and its predecessors should be extended to the same date and then expire. This provision expressly covered all franchises that had been granted without specific time limit. It was also provided that if the company then had or thereafter acquired any street railways lying beyond the corporate limits of the city as then defined, and if the territory within which such railways lay should at any time be annexed to the city, then all such suburban fran-

[1] Ordinance of December 19, 1887. *See* "General Ordinances of Milwaukee," *already cited*, p. 448.

chises should likewise expire on December 31, 1934. It was the declared intention of this ordinance to adjust all the franchises owned by the company so that all its rights within the city limits would expire at one time at the date just given. Under this ordinance the company's poles were to be placed or replaced according to a plan submitted to the board of public works and approved by it, and the right to change the location of poles was reserved to the board. The gauge of the railway tracks was fixed at four feet eight and a half inches, and the company was required to use modern improved rails approved by the board of public works, and lay them in such a way that carriages and other vehicles could easily and freely cross the streets at any and all points and in any and all directions without any obstruction. The duty of keeping the roadway in repair between the rails and the tracks and for one foot on either side was imposed upon the company, but apparently the company was not placed under any obligation to pave or repave any portion of the street. The overhead electric system was to be used, or such other motive power as might be agreed upon between the city and the company. All the rights of the city under laws and ordinances then in force to regulate the speed and headway of cars, the laying of rails and the stringing of wires, were expressly reserved and made applicable to the franchise granted by this ordinance except as otherwise expressly provided. The company was given the right by this ordinance to construct a large number of extensions, and in one case it was stipulated that the extension should be built within a specified period or the right to build it would be forfeited. It was provided that if the city limits should be extended in the future, the company would be under obligation to extend any of its lines reaching the city limits as they were at the time of the passage of the ordinance to the city limits as extended. If the company refused or neglected to extend its lines on its own motion, the common council was to adopt the necessary resolutions directing the company to make the extension within a specified time and the company was required to comply with the council's order. It was further provided that the railway company "shall extend its tracks over any and all such streets of said city as the common council shall at any time by ordinance direct,

but shall not be obliged to so extend its tracks unless there is a reasonable necessity therefor for the convenience of public travel." Moreover, the company could not be required to extend its lines from any of the terminal points to the city limits except along the streets on which its terminals were located, and in no case could the company be compelled to extend its lines except on streets or avenues which had first been made to the established grade.

Under this ordinance the rate of fare for one continuous passage upon the lines of railway within the city limits owned and operated by the company, whether constructed under this franchise or under any prior or indeed any later franchise, was limited to five cents for adults and three cents for one child or five cents for two children under ten years of age, infants under three years being carried free. Except on chartered "cars or carriages," the payment of a single fare would entitle a passenger "to one transfer at established points of transfer to any connecting or cross line of said railway company, for passage within said city." It was provided that convenient transfer points should be maintained, and that additional transfer points should be established to maintain and extend the transfer system already in force. A transfer ticket was to be good only for the passenger to whom it was issued and for a continuous trip in the direction specified, and upon the first car leaving the transfer intersection after the time designated. The company was also required to sell tickets both at its office and on its cars in packages of twenty-five for one dollar, or six for twenty-five cents. Until January 1, 1905, these tickets were to be used between 5:30 and 8 o'clock in the morning, central standard time, and between 5 and 7 o'clock in the afternoon. After January 1, 1905, the tickets were to be good at all hours of the day. Passengers using tickets were to be given the same privileges as those paying cash fare. It was stipulated that the company should keep in a conspicuous place in its cars for the convenience of its passengers a timepiece regulated by central standard time.

As compensation for this franchise, the company was to supply the city with the electric power necessary to swing all the drawbridges maintained by the city and crossed by the company's tracks. In order to prevent the tearing up of

newly paved streets, this ordinance provided that whenever the city determined to pave or repave any street where the company had tracks, notice was to be given to the company and thereupon it was immediately to make all repairs, connections, conduits and improvements deemed necessary for the operation of its railway. After the paving had been done, the company would have no right to open or disturb the pavement for any purpose whatsoever except with written permission signed by the mayor and board of public works. In further consideration of the franchise, the company was required to carry free on its cars all members of the police, fire and health departments of the city when in uniform, and all detectives of the police department. It was stated that "the rights and privileges hereby granted shall be considered to be prepayment by said city of all fares of all such members and officers of said departments." Before exercising any of the privileges granted by this ordinance, the company was required to file with the city clerk its written acceptance, including its agreement to all of the terms and conditions of the grant. The company was also required to file a list of all the transfer points then established.

It will be noted that under this ordinance a reduced fare with liberal transfers and the right to require reasonable extensions were secured to the city, but that no substantial compensation was required for the company's right to use the streets. While this ordinance did not include any new provision for the joint use of tracks, it stipulated that all the existing ordinances so far as they related to such matters as removal of snow and ice, the joint use of tracks, the occupation of streets, bridges and public places, and the grade, gauge and elevation of the tracks, should remain in force.

412. Labor tickets at reduced rates; materials and plan of construction to be approved in advance; extra fare for luggage; joint use of poles—Saginaw.—By an ordinance passed October 16, 1893, and amended in 1894 and 1895, franchises were granted by the city of Saginaw to the Union Street Railway Company and the Saginaw Street Railroad Company for the use of certain streets.[1] The company's poles were to be set not less than 125 feet apart lengthwise of the street, but poles belonging to other parties might be used if the com-

[1] Compiled Ordinances, City of Saginaw, 1898, p. 149.

panies could secure the permission of the owners. Wherever the trolley wires crossed any other electrical wires previously strung, the companies were required to maintain guard wires at all times. No materials could be used in the construction, alteration or repair of the tracks, poles, wires or other apparatus, or in the paving, planking or repairing of any street, without the inspection and approval of the board of public works or its authorized agent first being obtained. Moreover, before either company could enter upon any street for the purpose of laying or altering its tracks, it was required to submit to the board of public works for approval a complete diagram showing the line of the proposed track, the changes contemplated, the form and kind of rail to be laid and the location, character and purpose of all sidetracks, turnouts, switches and other special work. Whenever any street occupied by the tracks was paved, repaired or otherwise permanently improved, by order of the common council, upon the completion of the work an estimate was to be made by the board of public works of the cost of that part included within the limits of the tracks, and the amount so estimated, except the cost of paving at street intersections, was to be a charge upon the companies to be paid by them in five equal annual instalments. The cost of paving street intersections, however, was to be paid on demand.

In the original ordinance of 1893, the council reserved the right to regulate and prescribe the fare for passengers on the several lines operated by each of the companies and to require that passengers be carried by a continuous trip for a single fare the full length of the companies' lines. The rate of fare could not, however, be reduced below five cents per passenger without the companies' permission, and the companies were to have the privilege of charging double fares "at and after eleven o'clock P. M. upon cars not run upon schedule time, but put on especially for the accommodation of public meetings and entertainments." By one of the amendments adopted a year or two later, as well as by other street railway grants made in succeeding years, the maximum rates of fare were fixed as follows: labor tickets and school tickets, 8 for 25 cents; regular tickets, 6 for 25 cents; and single cash fare, 5 cents. Tickets were to be kept on sale at the companies' offices and at some central point in the business

centers on the East and West sides of the city. Labor tickets were to be accepted between 5:30 and 7:30 in the morning and between 5:30 and 6:30 in the afternoon. School tickets were to be good for children going to and from school during school days. Regular tickets were to entitle the passenger to all the privileges of cash fares, but the right of the companies to collect double fares after eleven o'clock in the evening was retained.

Under the original ordinance, cars were to be run for no other purpose than to transport passengers and their ordinary lagguge. Cars were to be in "style, equipment and accommodation, at least equal to those in use in other cities of like size in the State." The council reserved the right to prescribe from time to time the number of cars to be operated on each line of track, the hours of the day and night during which operation was to be continued and the speed and frequency with which the cars were to be run. Each passenger was to be allowed to take, free of charge, "such ordinary baggage as he can carry in his hand, and not take up more room than he is entitled to for his seat." The grantees were authorized to "charge such price, not exceeding one fare, for the carriage of any other baggage as may be just and proper." Careful, sober and prudent agents, conductors and "motorneers" were to be employed. The common council reserved the right to permit the moving of buildings across and along the tracks for not to exceed one block, between eleven o'clock at night and five o'clock in the morning, but no building could be moved across any track at any curve or switch which would require the removal of any of the companies' wires.

In case either of the companies should at any time wilfully and unreasonably neglect to comply with the conditions of the ordinances, or with such reasonable rules, orders or regulations made under the provisions of this ordinance for the protection of the interests, safety, welfare or accommodation of the public, then by a two-thirds vote of all the aldermen, the common council might revoke the franchises, but such right of revocation could be exercised only after the company had been given thirty days' notice to comply with the terms of the ordinance or other rules and regulations specified.

Each company was required to file with the city clerk an annual statement showing the number of cars operated on the different lines of its road, the number of passengers carried, and the gross and net earnings of the year. Whenever such net earnings, over and above expenses, interest and taxes, should exceed six per cent upon their capital stock, the companies were to pay the city five per cent of the excess of such net earnings.

Under the terms of the amended ordinance, the council reserved the right to authorize any person or company using wires for telephone, telegraph, electric light or other purposes to string its wires upon the poles of the railway companies after paying reasonable compensation to the owners. The companies were expressly required to indemnify the city against damages done to water or other pipes, or fire or police patrol alarm cables by electrolysis caused by the street railways. On the fifteenth day of each month, and at other times when required by the board of public works, the companies were to report to the board the quantity of power used and the number of cars operated by them or any change whatever that would materially affect the return circuit. This franchise was granted for a period of thirty years.

413. Transfers between companies; low fares for school children; free transportation for city officials; arbitration with employees; special permits for handling freight—Seattle.—Most of the street railways of Seattle are now operated by the Seattle Electric Company under franchises that have been granted from time to time during the past twenty years. These grants show a progressive development. On July 19, 1890, a franchise was granted to S. L. Bowman to construct and operate a street railway on a certain route for a period of twenty-five years for the conveyance of passengers and freight.[1] This ordinance laid down the rule, which has been followed in other Seattle ordinances granted since then, that the grantee should have the right to run his cars over the street railway tracks of any other person or corporation within the city limits, if the permission of the other party could be secured. The ordinance also contained the stipulation that the grantee should permit the joint use of the tracks laid down under this franchise, by other authorized parties

[1] Ordinance No, 1441, "Charter and Ordinances of Seattle, 1908," p. 480.

upon such rates and terms of compensation for the use of the tracks as might be agreed upon between the owner and the party desiring to use them. In case, however, the parties could not agree, the mayor and common council of the city were to fix the reasonable terms for such use. The priority of the rights of the grantee was to be preserved, however, and he was to have authority to make reasonable regulations governing the use of his tracks by the other parties.

Another Seattle policy laid down in this ordinance was the provision that before the grantee laid tracks on the route described "all damages or injury to be occasioned thereby to property abutting on any street, avenue or public place along which such track is to be laid down, shall be ascertained and compensation made therefor" in the manner provided by law. The duty of paving between the tracks and the rails and for one foot on either side, was imposed upon the grantee. The further obligation was imposed of maintaining electric lights of not less than thirty candle power not more than 250 feet apart along the portion of the route where overhead electric wires were used. The speed of cars in the business and settled residence portions of the city was limited to ten miles an hour, and the rate of fare to be charged was limited to five cents for a continuous passage from terminus to terminus of the grantee's route. A special car license fee limited to $25 per car per annum, to be fixed from time to time by city ordinance, was to be paid. In order to insure the construction of the road the grantee was required to deposit with the city the sum of $1,000 which would be forfeited unless the road was completed within the definite time stipulated in the ordinance, or within the period of any extension of time thereafter granted by the city.

On July 18, 1891, a street railway franchise was granted to Fred E. Sander and his successors.[1] The terms of this grant were substantially the same as those of the preceding one with two or three exceptions. The city inserted a clause to the effect that nothing in the ordinance should be construed as a warranty on the part of the city that any portion of the designated route was a legally established or existing street. The grant was given only in so far as the city then had or thereafter might acquire control over the route or any

[1] Ordinance No. 1772, *work cited*, p. 488.

part of it. There was also a provision to the effect that when any person had obtained permission to use any of the streets of the city for the purpose of moving any building, the grantee of the street railway franchise should upon forty-eight hours' notice, raise or remove the street railway wires in the way so as to allow a free and unobstructed passage for the building. There was also a clause in this franchise to the effect that the city might at any time thereafter repeal, amend or modify the ordinance "with due regard to the rights of the parties concerned and to the interests of the public." Nothing in the ordinance was to be interpreted as granting any exclusive franchise for the use of any street. The speed limit in the built-up portion of the city was in this ordinance reduced to eight miles an hour.

In another franchise granted October 31, 1891, giving Mr. Sander additional franchise routes, other changes in the city's franchise policy are in evidence.[1] The term of the grant was in this case made fifty years instead of twenty-five, but the grantee was required to pay the city one per cent of the gross receipts from the carriage of passengers on the road, until 1907; one and one-half per cent thereafter until 1911, and two per cent from 1912 on. The city also reserved the right in this ordinance to regulate, limit or entirely prohibit the running of freight cars and the transportation of goods upon the route covered by this franchise.

A street railway ordinance granted March 15, 1899, to Winthrop Smith and others, marks several advances in the city's requirements.[2] By this ordinance the city reserved the right to compel the grantees, whenever it compelled any other similar road to do so, "to adopt any improved method, in actual, practical and successful use, for conducting electrical currents for use of said railway through or beneath the streets of said City, and to remove the poles and wires therefrom when such plans shall have been adopted." Furthermore, it was expressly stipulated that the electrical current used by the grantees should be cared for so as to insure its return along their own metallic conductors. In this ordinance, apparently for the first time, the city stipulated that the payment of a fare should entitle a passenger to a trans-

[1] Ordinance No. 1879, *work cited*, p. 488.
[2] Ordinance No. 5277, *work cited*, p. 467.

fer to any other car line in the city which might give and receive transfers. Children going to or coming from school were to be carried at half fare, and all municipal officers engaged in municipal business were to be carried free, but on Sundays and holidays only firemen and policemen in the actual discharge of their duties were to be so carried. No official was to demand the right of free transportation, however, unless he produced a certificate of the mayor attested by the city clerk and sealed with the city seal certifying his official character, or in lieu of such certificate, displayed a badge of which the number and the name of the authorized user had been certified to the company by the mayor and the city clerk. The speed rate for cars was limited to twelve miles an hour and the city reserved the right to lower this limit. This grant was for the period ending Deecmber 31, 1925, and it was stipulated that within thirty days after the expiration of the franchise, the grantees or their successors must remove all portions of the roadbed and appurtenances and put the surface of the streets in as good condition for public travel and durability as the abutting portions of the street. The grantees were to pay the city two per cent of their gross receipts for the first fifteen years of the period and three per cent thereafter. A limited right to inspect the railway books for the purpose of ascertaining the gross receipts was reserved. There was a provision in this ordinance to the effect that if any dispute should at any time arise between the the grantees and their employees as to any matter of wages or employment, such dispute should be submitted to arbitration in accordance with the laws at that time in force in the state of Washington. In this franchise the reserved right to repeal, change or modify the ordinance was qualified so as to be effective on condition that the franchise was not operated in accordance with the provisions of the ordinance, or at all, but the city also reserved the right to repeal or modify the grant at any time "having due regard to the rights of the grantees and the interests of the public."

The principal franchise ordinance, however, of the Seattle Electric Company, is the ordinance approved March 9, 1900, which granted to J. D. Lowman and Jacob Furth a street railway franchise for carrying passengers, mails and freight, terminating "at twelve o'clock, midnight, December 31st,

A. D., 1934," and covering twenty-two enumerated routes.[1] Besides containing most of the conditions already described in connection with preceding ordinances and many other detailed regulations in regard to tracks, equipment and operation, this ordinance required that the grantees should within ninety days file with the city engineer true and correct maps, drawn on a scale of two hundred feet to the inch, and profiles of the lines covered by this franchise. The grantees were also required to file similar maps and profiles of any changes and additions made in the future. In case of double tracks, the space between the two tracks was to be not less than five or more than eight feet in width, and the board of public works was given authority to fix within these limits the exact distance that was to separate the tracks. The city reserved the right to attach any of the municipal wires to the company's poles. All equipment was to be "of first quality," and to be "so installed as to interfere as little as practicable with other public use of the streets." Cars were to be run between six o'clock in the morning and midnight on schedules prescribed from time to time by city ordinance. The city reserved the right at any time to prohibit the handling of freight on the grantees' lines within the city limits, or to prescribe restrictions and conditions in regard to the handling, loading, unloading and transporting of freight. Until otherwise provided by ordinance, the board of public works was authorized, under such conditions as it might deem proper, to issue permits to the grantees authorizing them to handle farm products and merchandise to and from freight cars along the street railway lines, and also to establish spur tracks running from the lines into their freight yards. It was stipulated, however, that no wood should be allowed to be loaded or unloaded in any street of the city, unless under authorization of a city ordinance.

The paving obligations were enlarged to include repaving and so as to extend for a distance of one and one-half feet on the outside of the rails. The grantees were required to furnish free transfers to any of the street railways constructed under certain enumerated ordinances of prior date, but this requirement was to be in force only as to such of the other lines as would give transfers to and receive them from the lines of these grantees "on the basis of a cash redemption by

[1] Ordinance No. 5874, *work cited*, p. 476.

each line of transfers issued by it and used on the other line at the rate of two and a half cents for ordinary transfers, and one and one fourth cents for school children transfers." Any such transfers would be good only at such time and place as would render the entire trip of the passenger practically continuous. In this ordinance the city officials entitled to free transportation were limited to policemen and firemen in uniform, the mayor, members of the city council and members of the board of public works, when riding on strictly city business. The grantees were required to pay the city two per cent of their gross receipts until 1920, and three per cent thereafter. They were also to keep on deposit with the city treasurer an emergency fund of $1,000 upon which the city could draw to meet expenses incurred for the immediate repair, in case of emergency, of dangerous defects found to exist in the portions of the street for which the grantees were responsible. The section of this ordinance requiring the arbitration of disputes with employees provided that the award of the arbitrators should be binding and conclusive upon both parties for the period of one year. It was also stipulated in this ordinance that if the grantees or their successors should acquire as a part of their system of railways any already existing railway or railways, they should within six months after the date of this ordinance, or within thirty days after the acquisition of such additional railways, file in the office of the city comptroller, a properly executed release of the franchises under which the railways so acquired had been operated. It was stipulated that if at any time the city's boundaries should be extended so as to bring in certain suburban extensions of the grantees' roads, such extensions should then in all respects fall within the limitations, terms and conditions of this ordinance. The grantees were forbidden to use any of their tracks as "dead tracks" or for standing cars. It was expressly set forth that the franchise and rights granted by this ordinance might be assigned or mortgaged, but no such assignment or mortgage should be valid until a copy of it had been filed in the city clerk's office. The ordinance was subject to repeal, amendment or modification in case the franchise was not operated in accordance with the provisions of this ordinance or was not operated at all.

An additional route was granted to the Seattle Electric Company by an ordinance approved June 26, 1901.[1] This entire route was to be constructed and in operation within three months after the date of the acceptance of the franchise. This time limit, however, was not to be effective if the company was prevented from building by accident, by act of God, by strikes, by act of the city, by inability to obtain material or by legal proceedings in court. Moreover, the company was authorized to purchase any existing railway or part of such railway along its route, in lieu of building a new road. This grant was for a period ending at midnight, October 31, 1941, instead of December 31, 1934, the date of the expiration of the ordinance last described.

Many additional franchises have been granted to the Seattle Electric Company from time to time since 1901. For the most part, however, the terms and conditions of these grants have been similar to those of the principal franchise of March 9, 1900, which has already been described. One or two franchises have been granted, however, which are now controlled by an independent company. One of these, granted January 11, 1907, to Merle J. Wightman and C. E. Muckler, required the grantees to keep on sale at their main office, at their power stations and on their cars, commutation tickets entitling the purchaser to twenty-five rides for a dollar. School children were to be carried at half fare, provision being made for the sale of two tickets for five cents and fifty tickets for one dollar.[2] The transfer provision of this franchise stipulated that transfers should be given to the lines of other companies. The basis of settlement between the companies was to be that each transfer should be redeemed by the company issuing it for such proportionate part of the fare paid as the run or local route of the car on which the transfer was received bore to the sum of the runs of the local routes of the cars on which the transfer was issued and on which the transfer was received. Provision was made for the common use of tracks and in case the parties interested were unable to agree upon the proper amount of the compensation to be paid the company owning the tracks the controversy was to be submitted to arbitration in accordance with the

[1] Ordinance No. 7015, *work cited*, p. 508.
[2] Ordinance No. 15,205, *work cited*, p. 681.

laws of the state of Washington. The arbitrators were to be three in number, one to be appointed by the company owning the tracks, one by the city council, and the third by these two. In case, however, the two first chosen could not agree upon a third within ten days of their appointment, then the third arbitrator might be named by one of the judges of the state supreme court at the request of the city or either of the parties interested in the use of the tracks in dispute. A provision was made in this franchise that wherever the tracks might cross any steam railway tracks, the crossing should be by overhead trestle, except that grade crossings might be built in the first instance and maintained until the trestle had been constructed. The city council was to have the right to require these grade crossings discontinued by an order giving the grantees at least eight months' written notice. The street railway line on Fourth avenue was to be deeded to the city by the grantees, with the reservation of the right to operate over this line during the term of the franchise. The grantees were, however, to maintain the track at their own expense in case they alone made use of that particular line, and were to pay their proportion of the cost in case the line was used in common with other companies. The city agreed to require any grantees who might obtain the right to operate over these tracks to pay into the city treasury in addition to the proportionate part of the cost of maintenance, a sum equal to five per cent on the proportion of the capitalized value of the tracks, "as may be represented by the ton mileage of the operation of its or their systems as compared with the total ton mileage operated over said tracks."

By another ordinance passed May 6, 1907, granting five several street railway routes to one, William R. Crawford, provision was made for express service on one of the routes.[1] Both local and express cars were to be run on this route, but the express cars were to stop to receive or discharge passengers at certain specified points "at long intervals only." The grantee was not required to accept commutation tickets on the express cars. The same provision in regard to transfers was inserted in this ordinance as the one in the ordinance last described.

[1] Ordinance No. 15,919, *work cited*, p. 649.

414. School children carried at reduced rates; city officials carried free; seats for passengers; right to purchase reserved — Los Angeles.—By an ordinance approved April 5, 1909, the city of Los Angeles gave to W. H. Workman and his assigns a franchise for a period of twenty-one years to operate a double track electric railway upon a portion of Boyle avenue.[1] The railway constructed under this franchise was to be used only for the transportation of passengers. The rate of fare for any distance over the road or its branches was to be not more than five cents, and tickets were to be sold to school children under eighteen years of age at half fare if purchased in quantities of at least a dollar's worth at a time. School children's tickets were to be available for use only between 8 A. M. and 6 P. M. in actual passage to and from school. These tickets were to be sold to any pupil upon request, on presentation of a certificate from a teacher approved by the principal of the school at which the pupil was enrolled. The ordinance also provided that regular and special policemen, police officers, firemen and letter-carriers while on duty; the mayor; the members of the city council and of the board of public works; police, fire, water, park and civil service commissioners; members of the board of health; members of the board of education; the city superintendent of schools and the directors of the public library should be carried free over the road and over any other road or roads within the city limits, owned, controlled or operated by the grantee, his successors or assigns. The grantee was also required to issue free transfers to passengers going in any direction, good for continuous passage over every other line of the grantee and the lines of any other road or roads within the city, controlled or operated by the grantee, his successor or assigns, or in which they had a controlling interest. Transfers from other lines were to be accepted on the same terms.

The grantee was required to pay the city two percent of the gross annual receipts of the railway after the expiration of five years. It was stipulated, however, that if the road covered by this franchise should be an extension of an existing system of railways, the gross receipts of this line should be estimated as one-half of the proportion of the total gross receipts of the system which the mileage of this ex-

[1] Ordinance No. 17,990, New Series.

tension bore to the total mileage of the system. In other words, the receipts per mile of this particular extension were to be reckoned as one-half the average receipts per mile of the entire system. Any neglect on the part of the company to file an annual statement of its gross earnings or to pay the required percentages into the city treasury was to work an automatic forfeiture of the franchise.

Construction was to be commenced within four months from the date of the grant and to be continuously prosecuted in good faith and without unnecessary delay so as to be completed within not more than three years from the time it was begun. It was specifically provided that one-third of the work should be completed within a year from the time of commencement. The tracks laid under this franchise were not to be more than four feet eight and one-half inches in width between the rails and were to be placed as nearly equi-distant from the center of the street as possible, and as near to each other as a proper regard for safety would allow. In all cases where the franchise route was already occupied by other lines of street railway, the grantee was given the right to operate over the existing tracks, and in case of a different gauge, to lay a third rail, over the distance traversed by the two roads jointly. The rails used were to be of at least sixty pounds weight per yard and the grantee was to pave or macadamize the roadway between the rails and the tracks and for two feet on either side and to keep this portion of the roadway constantly renewed and in repair.

Cars were to be run each way over the entire length of the road at intervals of not more than ten minutes from six o'clock in the morning until ten at night unless prevented by the elements, riots, strikes or other unavoidable causes. It was also expressly stipulated that "cars shall be operated over said road with sufficient frequency to carry and provide with seats all passengers applying for transportation thereover, excepting in times of extraordinary and unforeseen amounts of travel." The grantee was not authorized to sell or assign his franchise or any of the rights or privileges derived from it except by a duly executed written instrument filed in the office of the city clerk.

At the expiration of the period of twenty-one years the city was to have the right to purchase "the rails, track and

roadbed" and all property in the streets belonging to the grantee or his successors and laid or constructed under this franchise. The purchase was to be at a fair valuation to be determined by a board of three arbitrators, one to be appointed by the city, one by the grantee or his successors, and the third by these two. It was required that the city should give notice of its intension to purchase by a resolution of the city council passed not more than three years nor less than three months prior to the expiration of the franchise period. The award of the arbitrators was to be filed within three months after their appointment, and the city was to pay for the property within two months after the filing of the award.

CHAPTER XXXI.

MISCELLANEOUS STREET RAILWAY FRANCHISES.

415. Jim Crow regulations; universal transfers between companies; noiseless operation on court house loop required; grants subject to general ordinances.—Dallas.

416. Arbitration applied to extensions; no passes for city officials; lighting division purchased by city.—Jacksonville, Fla.

417. Franchise to take precedence over company's charter; general transfers; optional referendum.—Memphis.

418. Purchase at any time; tracks to be removed at expiration of ordinance.—Tacoma.

419. City may rent abandoned tracks; transfers between companies required; new company must purchase property unless franchise is renewed; compulsory arbitration with employees.—Trenton.

420. An early standard form of franchises; renewal to be offered to bidders who would take over the existing plant; conditions of joint use of tracks; reports required.—Buffalo.

421. Only citizens to be employed; minimum wage scale for workmen during construction; franchise to be renewed unless railway is purchased for municipal operation.—Buffalo.

422. Compensation to city per mile of route; railway to be operated by Union labor; city's rights in the streets reserved; franchise may be repealed for violation of terms.—Wheeling.

415. Jim Crow regulations; universal transfers between companies; noiseless operation on court house loop required; grants subject to general ordinance—Dallas.—By an ordinance approved November 13, 1905, the city council of Dallas regulated the seating of passengers on street cars so that whites and negroes should occupy separate seats and positions in the car.[1] By this ordinance it was made the duty of any white person entering a car to occupy the vacant seat nearest the front, and the duty of a negro to occupy the vacant seat nearest the rear. All passengers, regardless of race, upon entering an open car were to occupy the vacant seat nearest to the left hand side, and persons regardless of race were forbidden to stand on the rear platform of a closed car in such a manner as to interfere with other passengers getting on or off the car. Under this ordinance a seat was to be deemed

[1] "Franchise Ordinances of the City of Dallas," compiled by Charles T. Morriss 1903, p. 314.

vacant until occupied by the number of persons for which it was intended, or until occupied by a person of the opposite race. A wilful violation of the terms of this ordinance was to be deemed a misdemeanor punishable by a fine of not less than one dollar or more than fifty dollars. It was stipulated, however, that the ordinance should not be so construed as to prohibit a nurse from riding on the same seat with her employer or with the child in her charge even though of a different race, or so as to prohibit an officer from riding on the same seat with the prisoner in his charge. It was also stipulated that the provisions of the ordinance should not "extend to any other case of imperative necessity," and should not apply to excursion or special cars run strictly for the exclusive benefit of either race.

By another general ordinance approved August 9, 1906, the city council enacted that every person or company owning, leasing or operating any street railway within the city which joined, connected with, crossed or intersected any other line of street railway whether owned and operated by the same or another person or company, should issue at the points of connection or intersection, or at other stations established by the companies or by the city council, free transfer tickets to passengers who had paid the regular fare.[1] Such transfers could not be required, however, when the two lines were operated on parallel streets within a distance of two blocks for 4,000 feet or more, except that transfer tickets were to be issued at points where parallel lines diverged after running parallel for a distance of 4,000 feet or more. The person or company issuing the transfers was required to pay the person or company receiving the transfer passengers, one-half of each local fare collected for every transfer issued and taken up, unless the companies should agree upon some other division of fare. It was enacted that any person or company owning, leasing or operating a street railway within the city limits, or any manager, superintendent or employee of such person or company, who should violate any of the provisions of the ordinance, would be subject to a fine of from $10 to $200 upon conviction of the offense. In case of "continued and wilful violation" of the ordinance, the franchise might be forfeited by the city council upon giving the person or

[1] "Franchise Ordinances," *already cited*, p. 312.

corporation so offending thirty days' notice and a full opportunity to appear and be heard in regard to the matter.

Another ordinance of the city council, approved April 10, 1906, provided that all street railway companies operating cars in the city should equip them with pushbuttons for the use of passengers in signalling the conductor.[1] This ordinance also required that all cars used during the winter months should be equipped with approved heating apparatus, and be kept "comfortably warm" when used for the transportation of passengers.

By an ordinance approved October 31, 1903, the city required that all cars should be equipped with suitable fenders, which were to be of the most approved and modern pattern in use.[2] Before equipping its cars with any fenders, the company was required to submit the fender proposed to the city council for its approval. The penalty for violating this ordinance attached not only to the president, general manager, superintendent or other general directing officer of the company, but also to the motorman and conductor having charge of the car. Conviction under this ordinance was to be punishable by a fine of not more than $200.

By another general ordinance, it is made unlawful for any street railway company in Dallas to keep any conductor, motorman or other employee more than twelve consecutive hours in charge of a car or otherwise employed, or to set any such employee to work within eight hours from the time when he was relieved from twelve hours' service.[3] The weak point in this ordinance is the affirmative declaration that twelve consecutive hours shall constitute a day's work. The president, superintendent or manager of the street railway company who compels or permits an employee to violate the terms of this regulation renders himself liable to a fine of from $10 to $200.

Within the downtown district the speed of cars is limited to eight miles an hour.[4] Outside of this district, the limit is twelve miles an hour. The general ordinances relating to the operation of street railways prescribe detailed regulations which apply to all companies.

Street railway franchises have been granted to many differ-

[1] Franchise Ordinances, *already cited*, p. 311.
[2] *Ibid.*, p. 311.
[3] *Ibid.*, p. 310.
[4] *Ibid.* p. 309.

ent individuals and companies by the city of Dallas. Away back in 1872, soon after the city was incorporated, the directors of the Dallas City Railroad Company petitioned the council for a grant of "the right of way, free of all cost, through and over any of the streets" which the company might desire to use. The company asked for the use of five streets specified by name "together with all cross streets intersecting the same, from Houston street to the eastern boundary of the corporation of the City of Dallas, inclusive, as also any streets intersecting therewith on either side and in fact any street within the City Corporation which said company may now or hereafter choose to appropriate for that purpose." The right of way was to be ten feet wide in the center of each street, but special provision for switches for passing cars, and turnouts for delivering freight or passengers was made. On September 3, 1872, the prayer of the petitioners was granted by vote of the city council, and power was given to operate the railway either by steam or horse-power.[1] Subsequently, on March 13, 1884, an ordinance was passed granting certain individuals the right to construct and operate a street railway on certain streets.[2] This grant was made, however, on condition that the consents of "a majority of the front feet" should be obtained, "the frontage to be calculated not by blocks, but by the entire length of the said line computing each street separately and on both sides of said streets so to be occupied." The roadbeds, and strips two feet wide on the outside of the rails were to be graded, graveled and kept in repair and paved when the rest of the street was paved, at the expense of the grantee, on penalty of forfeiture of the franchise for failure to do so. It was stipulated that this franchise should expire and revert to the city at the end of twenty-five years. The amount spent by the grantees in bringing to grade that portion of the streets not lying within the tracks or within a two-foot strip on either side of the outside rails, was to be credited to the company on all license fees that might thereafter be levied by the city council for the privilege of using the streets.

As a result of these and other grants, four street railway companies were incorporated, which in 1887 united to form

[1] Franchise Ordinances, *already cited*, p.108. [2] *Ibid.*, page 99.

the Dallas Consolidated Street Railway Company.[1] The consolidated company received a franchise on April 18, 1887, covering all the streets that were then occupied by the street railway tracks which had been built by the constituent companies. This grant was for a period of thirty-five years and contained an express provision to the effect that all of the rights and franchises belonging to the constituent companies named in the ordinance, and especially those franchises claimed by the Dallas City Railway Company, should be surrendered and held for naught. The consolidated franchise provided for the payment by the company of a paving tax which in case of either first paving or repaving would be levied by special assessments against the company's roadbed and franchises. The grant was made subject to the city charter and all future charter amendments pertaining to the railways, and also subject to all existing and future ordinances controlling and regulating street railroads, so far as not inconsistent with the terms of this grant. For the privileges acquired, the company agreed to pay the city a bonus of $50,000 in semi-annual installments of $750 each during a period of thirty-three years, except that the second payment of the last year was to be $1,250. All money received from this bonus was to be applied to the improvement of streets on which the company's tracks were laid. Failure to pay the street paving tax and costs, or any installment of the bonus when due, was to operate as a forfeiture of the entire franchise. In this ordinance the city established the policy that no policeman, fireman or city engineer should "be charged with passage" on the street railways while riding from one point to another for the purpose of discharging any official duty. The fare which the company might charge was limited to five cents "for the transportation of passengers from point to point, or for a round trip" over the company's line, between six o'clock in the morning and ten o'clock at night.

In the years 1888 and 1890 three or four new franchises were granted to independent companies or groups of individuals. The terms and conditions of these grants were for the most part similar to those of the consolidated street railway franchise of 1887. In some of them, however, we find a provision to the effect that the rolling stock and street rail-

[1] Franchise Ordinances, *already cited*, p. 103.

way buildings must be kept within the city limits. As a general rule these ordinances were granted for a period of thirty-five years and made provision for the payment of a few hundred dollars a year to the city as a bonus. In 1902 a new franchise was granted to A. K. Bonta who organized the Metropolitan Street Railway Company.[1] This franchise was granted for a period of twenty years and was subject to certain new conditions of considerable interest. On a number of specified streets the grantee was required to lay grooved girder rails weighing not less than ninety-one pounds per yard, and in all cases the character, weight, size and dimension of the rails were to be subject to the control of the city council and board of commissioners. All rails were to be laid with concrete metallic tie foundation, and in the construction of the track such instrumentalities and appliances were to be used as would best protect the city and private concerns against the effects of electrolysis. Cars were to be heated by electricity, and no open cars were to be used from November 15 to March 31. From April 1 to September 15, on the other hand, open cars were to be used exclusively, unless the use of closed cars was authorized in writing by the mayor. Not only policemen, firemen and the city engineer, but also the city engineer's assistants were to be carried free when going to and fro in the discharge of their official duties, when provided with proper badges. Moreover, all city officials were to be furnished with passes. Transfer stations were to be established and transfers issued under regulations prescribed by the city. It was stipulated that the city council might confer upon any other street railway company or companies thereafter constructing and operating a street car system in Dallas, the right to use the whole or any portion of this grantee's tracks on Main street west of a certain point, and also other portions of the tracks not exceeding six blocks in length. It was stipulated, however, that this right to the joint use of tracks should be exercised so as not improperly to interfere with the use of the tracks by their owner and that just compensation should be made to the owner. But this right to joint use was not to apply to any street railways already in operation or their successors, except that the Dallas Consolidated Electric Street Railways Com-

[1] Franchise Ordinances, *already cited*, p. 181.

pany, successor of the Dallas Consolidated Street Railway Company, might be given the right to use the tracks on Main street on special conditions set forth in the ordinance. It was required that for the use of such tracks, the company should either pay the owner an equitable proportion of the cost of construction, with six per cent interest on this amount from the date when the tracks were completed until the time payment was made, or else the company should pay to the owner an annual rental of six per cent on one-half of the cost of reconstruction of the tracks, and should pay in addition to such percentage one-half of the cost of maintenance. In case of joint use the tracks were to be used by each party in such a manner as not to interfere improperly with the use of the tracks by the other party. In case of disagreement between the parties, the joint use of tracks was to be subject to regulation by the city. It was stipulated that if the grantee should abuse or misuse its franchise or fail to comply with any of its terms and conditions, such abuse, misuse or failure should be deemed a forfeiture of the ordinance. It was expressly provided that "the rights, privileges and franchises herein granted or any property acquired or owned in the exercise of said rights, privileges and franchises, shall never be sold or in any manner transferred to or become the property of any concern now owning or operating any line of street railway in the City of Dallas or any assigns or successor thereof."

By an ordinance approved July 30, 1903, the Metropolitan Street Railway Company was authorized to connect its tracks at certain points with the tracks of the Dallas Consolidated Electric Street Railway Company and the Rapid Transit Railway Company to form a belt line over which it could operate its cars.[1] This privilege, however, was contingent upon the condition that the three companies should immediately establish and maintain a system of transfers at all the points of intersection or connection of their lines with the belt line.

A franchise granted April 11, 1903, to the Dallas Consolidated Electric Street Railway Company contained a unique provision to prevent noisy operation on the street railway loop around the county court-house.

[1] Franchise Ordinances, *already cited*, p. 190.

"The said company, its successors or assigns," ran the ordinance,[1] "during hours between 8:30 A.M. and 6 P.M., each week day, shall never ring any bell, sound any gong, blow any whistle or operate any other or different device for giving alarm on said loop within two hundred feet of the court-house, and said company shall keep the track on said loop clear and clean from dirt or other small obstructions which would tend to increase the noise made by the running of the cars on said loop, and the said company shall in no case run its cars on said loop at a greater rate of speed than four miles an hour during above hours, and all curves shall be kept clean and well greased. Because of the fact that this loop surrounds the Dallas County Court House and the noise usually accompanying the operation of a street car would greatly hinder the proper use of said building, it is here provided that each of the foregoing provisions is essential and necessary, and that should they be systematically or persistently violated or neglected this franchise would be thereby forfeited."

While Dallas has enjoyed competition in the street railway business longer than most cities, the city has been enabled by general ordinance to secure most of the benefits of monopoly through the establishment of a system of universal transfers.

416. Arbitration applied to extensions; no passes for city officials; lighting division purchased by city—Jacksonville, Fla.—One of the most interesting street railway franchises granted by a small city that have come to the writer's attention, is the ordinance of the city of Jacksonville, approved January 26, 1907.[1] This ordinance recited that the Jacksonville Electric Company in addition to its own street railway had acquired the lines of the Main Street Railroad Company and had also acquired control of the business of the Jacksonville Electric Light Company. This ordinance provided for the transfer to the city of the franchises and rights under which electricity was furnished to consumers other than the Jacksonville Electric Company for the operation of its street railways. The electric plant was to remain in the possession of the companies and they were to furnish to the city direct such electric current as it might wish to purchase and as they could conveniently supply, and they were also to supply private consumers on behalf of the city on terms and conditions to be set forth in a contract between the companies and the board of trustees of the water works and improvement bonds of the city. Having thus disposed of the electric lighting question, the ordinance proceeded to grant to the Jacksonville Electric Company a street railway franchise for a period of

[1] Franchise Ordinances, *already cited*, p. 138. [2] Ordinance No. I-67.

twenty-five years, and to prescribe the terms and conditions upon which the street railways were to be constructed and operated. The various routes were enumerated in the ordinance and it was stipulated that the company should construct and put in operation street railway lines on all streets mentioned where no lines were already in existence, within one year after the ordinance went into effect, with the exception of certain lines which were to be constructed after viaducts had been completed by the city. The company was required to pay the city three per cent of the gross earnings of all the street railway lines in Jacksonville held or operated by it. If, however, the city should choose to grant any new franchises or to extend any already existing franchises to any other person or corporation for the operation of street railways paralleling this company's lines, and competing with it, the company was to be relieved for the remainder of the franchise period from the payment of this gross receipts tax. Five-cent fares and free transfers were required within the city limits as they existed at the time or might thereafter be established. Children under five years of age accompanied by a passenger paying a fare, were to be carried free. Tickets for the use of school children were to be sold at the rate of twenty for fifty cents.

The company's lines were to be extended or additional lines to be constructed within a reasonable time after being required by the city by a two-thirds vote of the city council approved by the mayor. If the company, however, should notify the mayor within sixty days after the passage of a resolution requiring extensions, that it deemed the construction of the extensions or any part of them inadvisable at the time, then arbitration was to be invoked to determine "as to whether or not the business that should be reasonably expected from or to be carried over any of said additional lines, or any part thereof, will warrant the necessary expenditure" therefor at that time. The city was to name as one of the arbitrators "a man of high standing, character and ability in the community and not himself interested in the construction of the proposed line." The company was to name as one of the arbitrators "a man of high standing, character and ability, not interested directly or indirectly in the company, and not in its employ." The two arbitrators so selected were

to choose a third. If the arbitrators found that the construction of the proposed additional line or lines or any part of them was advisable and the necessary expenditure warranted, then the company was bound to construct and operate such lines within a reasonable time fixed by the arbitrators. Otherwise the extensions could not be required. Any failure to appoint an arbitrator within the time fixed, or any unreasonable delay in the matter of the arbitration attributable to the company or its agents or to the arbitrators selected by it, would constitute "a waiver of the arbitration and an admission of the advisability and necessity of the construction of the line or lines in question."

It was stipulated that the company should equip and maintain its lines "with modern, up-to-date cars, best suited to the service, of sufficient numbers" to properly operate the lines, and should from time to time "increase the number of said up-to-date cars and operate the same upon regular schedules, as the conveniences of the travelling public may reasonably require." The obligation to pave, repave and maintain the surface of the street in and between the tracks and for two feet on either side was imposed upon the company. The laying, locating and maintenance of tracks and crossings and all construction work were to be under the supervision of the board of public works. It was declared to be the primary consideration for the passage of this ordinance that the company should at all times and in all respects give the people of the city "a thoroughly first-class and up-to-date construction, equipment, operation and service over each of its lines." The company was to be subject to all reasonable ordinances and regulations that might be ordained from time to time.

The city marshal and all policemen, firemen, and sanitary officers of the city in uniform, or wearing official badges, were to "be passed free" over any of the company's lines, but the company was forbidden to "issue any pass to the mayor, city treasurer, comptroller, municipal judge or any city councilman or any member of the board of public works or any member of the board of bond trustees."

In case the company should remove any tracks after they had first been laid and used for street railway purposes on any of the streets covered by this ordinance, such action was to

operate as a forfeiture of the entire franchise, unless permission to remove the tracks in question had first been obtained. The company was authorized to enter into contracts with any of the city departments, having the requisite authority, "for transportation for hire of material in the matters pertaining to the business or needs of the city." Such materials were to be transported after midnight and at such other times as would least inconvenience the passenger traffic. In case the company should violate any of the conditions of the ordinance, or of any lawful city ordinance, or should fail to comply with any reasonable provision of the city's regulatory ordinances, and if the company should continue in such violation or noncompliance for more than five days after being notified in writing by the mayor or the chairman of the board of public works or the president of the city council to desist, then the company was to be deemed to have forfeited and annulled all its franchises, rights and immunities, and the forfeiture was to be declared by the judge of the circuit court of the county of Duval "upon affirmative finding of a jury trying the case according to law, or upon other appropriate judicial procedure."

In return for the confirmation of its franchise rights for the term of twenty-five years, the company, "as a condition precedent to the taking effect" of the grant, gave the city the right at the expiration of the twenty-five year period to purchase the company's street railway or such portion of it as the city might desire to purchase, in accordance with the existing laws of the state of Florida.

This ordinance was to go into effect when ratified by the electorate of the city.

417. Franchise to take precedence over company's charter; general transfers; optional referendum—Memphis.—By an ordinance passed November 20, 1895, the Memphis Street Railway Company acquired a fifty-year franchise over all the streets and highways named in the company's charter.[1] The company was required to confine itself exclusively to the carriage of passengers, except that it was authorized to convey freight for its own use. The rate of fare was limited to five cents, with free carriage for children under five years

[1] "Digest of the Laws, Ordinances and Contracts of the City of Memphis" to June 30, 1909, compiled by H. Douglass Hughey, p. 761.

of age accompanied by adults. It was stipulated, however, that "if, after the passage of this ordinance, it appears to the Legislative Council that Memphis is entitled to a cheaper fare, then, by resolution or ordinance, the said Council may, at any time, require said car company to sell eleven tickets for fifty cents." The company was authorized to purchase the property of four existing street railway companies, and was required to extend its lines on certain enumerated streets within twelve months. The company was also required to furnish free transfers during all hours of the day until 7:30 P. M. at certain intersections, and subsequently to January 1, 1900, the company was to provide "such general transfer system as will enable passengers at all hours during the operation of cars to obtain for a five-cent cash fare a continuous passage between any two points on any of its lines within said city limits, as now or hereafter established," but the company was authorized to make rules and regulations relative to transfers in order to protect itself from "imposition and abuse." It was made a specific condition of the grant that in all respects in which the company's charter and this ordinance should vary or conflict, the ordinance should prevail. Indeed, it was a further condition of the grant that if at any time it should be determined that any of the provisions of the ordinance were ineffective or void because in conflict or at variance with the company's charter, or for any other reason, and if the company should take advantage of such decision, or without such decision should attempt to avail itself of any charter provision at variance with the ordinance, then the grant was to be null and void. The company's charter, taken out under the general laws of the state, and this ordinance were to be the sole and controlling legislation as between the city and the company, and were declared to "embody all the municipal law and requirements on the subject." The company was to confine its claims to the streets covered by its own charter and in no event revert to the charter or contract rights of the Citizens' Street Railroad Company, which it was about to acquire. The terms and provisions of this ordinance were to be enforced within the limits of the city as they were at the time or as they might be established at any time thereafter.

On February 22, 1905, the city gave a franchise for the period ending November 20, 1945, to the Memphis Street

Railway Extension Company for the construction and operation of a railway on the streets mentioned in the company's charter.[1] The extensions to be built by this company were to be completed to the city limits by December 1, 1905, under penalty of the forfeiture of the franchise. This grant was made subject to the terms and conditions of the Memphis Street Railway franchise just described.

It should be noted that in 1909 an amendment to the Memphis charter gave the city the commission form of government.[2] As the city charter now stands no franchise may be granted by the city "except by ordinance fully guarding and protecting the rights of the public."[3] In case a petition of 500 freeholders is filed with the board of commissioners asking that any franchise ordinance be submitted to popular vote, the ordinance will not go into effect until it has been approved by a majority of the citizens voting at a general or a special election. The petition may be presented either before the ordinance has been passed or within thirty days thereafter. No special election for the same purpose may be held, however, within twelve months after the first election. No grant may be made for a longer period than thirty years.

418. Purchase at any time; tracks to be removed at expiration of ordinance Tacoma.—The recent franchise policy of the city of Tacoma is illustrated by the terms of an ordinance approved June 28, 1906, granting to the Pacific Traction Company the right to construct and operate a street railway for both passengers and freight on South 15th street.[4] The most striking provision of this ordinance as it was originally adopted was found in section 19, which reserved to the city the right at any time "to appropriate by purchase at a reasonable price" the property of the company "of every name, nature and description" located within the city limits and connecting with or appertaining to this street railway line, with all the rights, privileges and franchises granted by the ordinance, subject to the stipulation, however, that in case of the appropriation of the property by the city "the franchise granted by this ordinance shall not be estimated as having any money value." Although the ordinance with this

[1] Digest of Laws etc., above referred to, p. 778.
[2] Chapter 346 Acts of 1909, Tennessee.
[3] Digest of Laws etc., above referred to, p. 80.
[4] Ordinance No. 2666.

clause in it was immediately accepted by the company, it appears that six months later an amendment was adopted striking out the last clause which had stipulated that the city would not have to pay for the franchise if it took the property over.[1]

The term for which this franchise was granted was twenty-five years, and it was expressly provided that at the expiration of the grant either by lapse of time or otherwise, unless it should be renewed, the company should commence within ten days after such expiration to remove the rails, ties, poles, wires and appurtenances constructed or used in the operation of this street railway line from the street, and should finish such removal within six months, leaving the street in as good condition as it would have been in if the street railway line had never been built. In case the company should fail to remove its property from the streets within the six months allowed after the expiration of the franchise, then the city would have the option to remove the tracks and appurtenances at the cost of the company, or if it desired, to retain them in the streets "as its own absolute property, for its own personal use and benefit, without any act or deed whatsoever on the part of any court or of said grantee."

This franchise was to be void unless the company filed an absolute and unconditional acceptance in writing within forty days after the publication of the ordinance, and unless the street railway line was completed for its entire distance and in operation within two years from the date of such acceptance. It was provided, moreover, that this franchise should not be construed as an exclusive grant, but that the city reserved the right to give similar privileges to other persons or corporations on the same street "due regard being had to the rights and privileges herein granted to said Pacific Traction Company and to the priority of said rights." The particular line covered by this franchise was to be operated in connection with the company's general system, the fare being limited to five cents with the right to a transfer. It was stipulated, however, that municipal officers and such city employees as might be designated by the commissioner of public works, when engaged in municipal business, as well as letter-carriers in uniform, should be carried free over this line.

[1] *See* Ordinance No. 2821, approved January 5, 1907.

Children going to and from school were to be carried at half fare. Provision was made for the raising, cutting or removing of the company's wires at its own expense upon twenty-four hours' written notice when necessary to clear the way for the removal of any building for which a permit had been issued. If the company under such circumstances refused to take the necessary action to permit the removal of the building, the right to raise, cut or remove the wires at the company's expense was reserved to the commissioner of public works. No part of the street railway track laid under this ordinance was to be used as a dead track upon which cars would be allowed to stand to the obstruction of the street. It was provided, also, that no freight should be received, loaded or discharged upon the street except package freight, and that no one package should exceed 150 pounds in weight. Indeed, no freight was to be handled by the company until it had established within the city a suitable freight yard upon private property. It was stipulated that if the construction of this street railway line should necessitate the construction or reconstruction of any bridge, viaduct or tunnel, the entire first cost should be borne by the company, and that any such bridge or viaduct should be of such width and so constructed as to constitute a public thoroughfare for all ordinary purposes. Moreover, the company was to pay during the life of this franchise at least one-half of the cost of repairing and maintaining any such bridge or viaduct after first construction, and also at least one-half of the cost of rebuilding or reconstruction, if that should become necessary during the life of the franchise. Furthermore, upon the company was imposed the burden of paving, improving and repaving from time to time at its own expense that portion of the street surface between its tracks, its rails and for two feet on either side. In case of double tracks, the distance between track centers was not to be more than twelve feet, which would mean that the tracks were not to be more than seven feet three and three-fourths inches apart. There were many other details in this ordinance, but none of them sufficiently unique to warrant special mention.

419. City may rent abandoned tracks; transfers between companies required; new company must purchase property unless franchise is renewed; compulsory arbitration with

employees — Trenton.—The first street railway ordinance of the city of Trenton was passed July 28, 1863, and gave authority for the construction of a horse railway through certain streets.[1] This ordinance had a number of interesting features. It provided that "bells of proper size and tone, to notify foot passengers and others passing in or across the streets in which said railway may be laid, of the approach of the cars," should be attached to the horses. This ordinance expressly provided that none of its provisions should be construed in any way to impair the right of the city to grant to any other company the right to lay or use any tracks or railways in any of the streets of the city. It provided that as soon as the stockholders of the company should receive eight per cent dividends, the company should pay the city an annual license tax of $20 for each car operated by it. It provided that if the company should neglect to operate cars over the road for the accommodation of the public for a period of three consecutive months, the common council should have the right to rent out the railway to any other person or company who would be willing to run cars on it. The rental was to be paid to the city for the use of the city. If the common council should be unable to rent the railway or to compel the company to place cars on it for three months after it had been abandoned, then the council might cause the railway to be removed from the streets and might sell the materials comprising it. After paying all expenses of the removal and sale, and of repairing the streets, the city would pay the balance, if any, to the company's legal representative. The council reserved the right to alter or amend this ordinance "at any future time whenever it shall become necessary for the public good so to do." The section relating to the rental, or removal and sale of abandoned tracks has been continued in substantially the same form through most of the Trenton street railway ordinances down to the present time.

A franchise granted to the City Railway Company in 1876 fixed a maximum fare of six cents, but in later ordinances the city required a maximum fare of five cents for each passenger over five years of age and free carriage for children under five.[2] The City Railway ordinance contained a pro-

[1] Charter and Ordinances of Trenton, 1903, p. 392.
[2] *Ibid.*, pp. 415, 458, 497, 505.

vision imposing a penalty of $50 upon the company for each and every violation of any of the provisions of the grant, and for a continual violation after notice from the street committee, the penalty was to be $50 a day until the violation ceased. The council reserved the right to stop the running of all cars on the railway if the company refused to pay the penalties prescribed.

In the later ordinances, as a penalty for the company's charging more than the prescribed rates, the mayor was empowered to revoke the license of any car on which excessive rates were charged. In 1895 a special license fee of $7.50 was levied by ordinance upon every open or trailer car operated by the Trenton Passenger Railway Company.[1] This license fee was to be paid before the cars could be operated. In most of the later ordinances granted after the introduction of electricity as a motive power, an annual license fee of $15 for every car used for carrying passengers has been the usual requirement.[2] Moreover, in each case the company has been required to place the city clerk's certificate showing the car number and the payment of the license fee in a conspicuous place in the car. Under the first ordinance authorizing the use of electricity, passed February 12, 1894, the obligation of the company in the matter of repairing and repaving streets, covered the street surface inside the rails and between the tracks and for a distance of two feet on either side of a double track and for three feet on either side of a single track.[3] This ordinance provided, moreover, that on paved streets where the kind of paving material in and about the company's tracks was different from that used on the rest of the street, the company might be required to replace the pavement along its tracks so as to make the whole street uniform, but under this provision, the company could not be required to pave more than 2000 square yards in any one year.

Trenton is a broad-gauge town, but unfortunately the gauges provided for in its franchise ordinances are not uniform. The ordinance of 1894 to the Trenton Passenger Railway Company, Consolidated, prescribed a maximum of five feet two inches, while in an ordinance of 1901 to the Camden

[1] Charter and Ordinances, *already cited*, p. 436.
[2] *Ibid.*, pp. 447, 478, 488, 498, 507, 515, 523, 534.
[3] *Ibid.*, p. 443.

and Trenton Railway Company, a gauge of five feet for certain streets was fixed.[1] In an ordinance of 1902 to the New Jersey and Pennsylvania Traction Company, a gauge of five feet two and a quarter inches was prescribed.[2]

Most of the important features of the later street railway franchises are contained in the grant of December 31, 1902, to the New Jersey and Pennsylvania Traction Company.[3] This grant was for an electric railway along a certain specified street. The council reserved the right to make reasonable regulations governing the speed of cars, the manner of stopping cars, the number of trips daily, the hours of service and the number of cars in a train. This ordinance also provided for a reduced fare, three cents being the rate within the city limits as then existing, and five cents the rate outside of the city limits within a radius of five miles. In the case of any street which had already been paved, occupied by the tracks, the company was required to repay to the owners of abutting property the portion of the cost corresponding to the portion of the street pavement included within the outer rails of the company's tracks. The amount to be paid to each owner was to be ascertained by the city engineer and the company's engineer. The company was to lay girder-groove rails of the best and most approved pattern. In case the company, after beginning to lay its tracks on the streets designated, should stop or delay its work before completion for a period of four weeks consecutively, except during the months of December, January and February, after notice from the common council to proceed, then the franchise for such streets would be null and void, and the city would have authority at the company's expense to take up the incomplete track or tracks and restore the street to a proper condition. The poles erected for the company's use were to be of iron, painted and placed as nearly as practicable opposite each other, and were to be placed at an average of ninety feet apart lengthwise of the street. Before commencing the construction of its plant, the company was required to file with the common council a detailed writing or description of its proposed construction, and receive the approval of the council before any construction work was undertaken. A tax of one per cent of the company's gross receipts from passenger traf-

[1] Charter and Ordinances, *already cited*, pp. 448, 476, 513. [2] *Ibid.*, p. 535. [3] *Ibid.*, p. 598.

fic within the city limits was levied for the first twenty years of the grant and a tax of three per cent thereafter. Each electric car operated by the company was to be equipped with proper guards and fenders of the latest design. The common council specifically reserved the right to grant to any other company the privilege of running over such portions of the streets granted to this company as might be necessary to secure passage from one part of the city to another, but in any such case the company securing passage rights was required, as a condition precedent to the exercise of such privilege, to pay to this company a proportionate part of the cost of construction. If the two companies should be unable to agree as to this division of cost, the matter was to be determined by two "indifferent persons" appointed by the two companies, respectively, or by an umpire selected by these two. If either party should fail to appoint a valuer for the space of five days after being called upon to do so, or should appoint a valuer who would not act, then the valuer appointed by the other party would be authorized to make a final valuation alone. The company was required under this franchise to exchange transfers with other street railways "upon any equitable basis that can be agreed upon" between the companies. In case of failure to agree each company was to appoint an arbitrator. Two other arbitrators were to be selected by the common council, and a fifth by the four so chosen. The decision of the majority of the arbitrators was to be final and binding upon both companies.

It was expressly stipulated that this franchise should expire in fifty years, and in this particular, as in the reduction of the fare below the five cent rate, this ordinance differed from all preceding street railway grants in Trenton. It was provided, however, that the company should have the privilege of renewing the franchise "upon an equitable readjustment of the terms." But if no extension or renewal was granted by the city, then any party to whom a franchise covering this company's route or any extensions of it should be granted, would be under obligation to purchase the railroad at a valuation to be ascertained by taking the *bona fide* cost of reproducing the road and its equipment, including the value of the necessary land, reasonable allowance being made for depreciation.

The city reserved the right to purchase from the company the upper Delaware River bridge at any time at a price to be mutally agreed upon or to be determined by three impartial appraisers, residents of Pennsylvania or New Jersey, but not taxpayers in the city or stockholders in the company. The city and the company were each to choose one of the appraisers and the third was to be selected by the two so chosen. The right was reserved to any other electric railway company to use this bridge for its cars upon payment of its proportionate share of the cost of the bridge, the expense of maintaining it and of maintaining the track and electric railway equipment, and also its proportionate share of the electrical current used in common by the companies. The share of the new company was to be computed in proportion to the number of cars per hour run by the companies on the bridge.

This franchise was unusual in that it made definite provision to avoid interruption of service through labor disputes. It was specifically agreed that "whenever any controversy or disagreement arises between the company operating under this ordinance and its employees, which interferes or threatens to interfere with the operation of the road, the question or disagreement shall be submitted to arbitrators, two to be selected by the company and two by the employees, and their decision shall be final; if the said arbitrators shall fail to agree within three days, then a fifth arbitrator shall be selected by the mayor, and the decision of a majority of said arbitrators shall be final and binding."

The company agreed to furnish a bond to indemnify the city against damages from electrolysis to the water mains and other pipes located in the streets. This grant, in common with other Trenton franchises of later years, was to be made binding upon the company by a contract filed with the city clerk in the form drawn by the city council and approved by the common council, by which the company should agree "to abide by and fully perform all the matters and things in this ordinance contained to be observed, kept and performed."

420. An early standard form of franchises; renewal to be offered to bidders who would take over the existing plant; conditions of joint use of tracks; reports required—Buffalo.—After taking proceedings which, as reprinted, are equivalent to about 250 pages of this book, and which include a con-

tinuous stream of resolutions, motions, amendments, remonstrances, etc., extending over sixteen months, the common council of the city of Buffalo, on December 17, 1860, finally adopted the rules under which it determined that lines of street railway in Main street and Niagara street should be constructed.[1] These rules are of exceptional interest because they represent an elaborate attempt in the very earliest stages of street railway development to arrive at a standard form of franchise that would adequately protect the public interest. The rules in the case of each railroad were thirty in number, and were substantially identical except as adapted to the different circumstances of the two proposed lines. Under the procedure adopted in Buffalo when street railways were first introduced, the common council would pass a resolution to the effect that it intended to grant authority for the construction of a street railway upon a specified route under terms and conditions set forth. This resolution would then be published and sealed proposals received from any parties desiring to construct the road. The franchise would be awarded to the persons offering to carry passengers at the lowest fares, subject to the terms and conditions elaborated in the council's resolution.

The proposed grantees were required to give adequate security to guarantee their compliance in all respects with the terms, conditions and stipulations prescribed in the franchise, or that might thereafter be prescribed by virtue of any right reserved to the council. Before placing any car in use on their road, and annually thereafter, the grantees were to pay to the city treasurer a fee of five dollars for each of their cars and obtain from the mayor a license for each car. The car number was to be painted on some conspicuous place on the outside of the car. The road might be built by a single or a double track, as the grantees should determine. If a single track was to be laid, it was to be placed in the center of the street with suitable turnouts on either side to allow cars going in opposite directions "safely and conveniently to pass without endangering persons riding in or upon either car." In case of double tracks, the inner rail was to laid not less than one foot nine inches, nor more than two feet

[1] "Franchises, Permits, Privileges, etc. etc., granted to the International Railway Company and to Subsidiary and Constituent Companies by the City of Buffalo," Volume 1, 1859–1860, pp. 163, 171.

four inches from the center of the street. The gauge of the tracks was to be four feet ten inches "so as to accommodate the most common width of carriage wheels." The grantees were authorized at any time to build a second track "so that they do not interrupt the running of their cars on the first completed track."

The powers and privileges conferred by the grant were to be limited to a period of thirty years from the date of the acceptance of the franchise by the grantees, except that a renewal of the grant might be had for an additional period of thirty years upon certain conditions. Within the first six months of the last year of the original thirty-year period, unless the council and the grantees were able to agree on the value of the property, an appraisal was to be made by disinterested persons, one appointed by the city and one by the company. However, if these could not agree, they were to choose a third and a decision of the majority was to be final and binding. The appraisal was to be of "the aggregate worth and value of such property and appurtenances, as the same shall then be." The decision of the appraisers was to be filed in the office of the city clerk at least thirty days before the end of the thirty-year period. Thereupon the council was to advertise for proposals to pay this appraised value and for the continuation of the franchise for a further term of thirty years. Bidders were also to state the lowest rate of fare at which they would carry passengers for such extended term. The renewal franchise was to be awarded to the parties who would bid lowest as to fares and who would purchase the existing property at its appraised value. If the lowest bidder failed to comply with the terms of his bid, then the next lowest bidder who would comply with the terms of the bid was to be deemed the lowest bidder and receive the renewal grant. It was stipulated, however, that "in case such decision and appraisal shall not be made and filed, as and within the time aforesaid, or in case such ascertained and fixed worth and value, shall not be paid, as and at the time aforesaid for that purpose stated, then the grant herein mentioned, and the term thereof, shall extend and be continued to the grantees for the first thirty years, or their assigns, to and through an additional term and period of thirty years, making sixty years in all." If, however, the

grantees of the Main Street Railroad franchise should be entitled to have the thirty-year continuation of their grant and should also bid for such continuation or renewal, in that case, from the time of the commencement of the extended term these grantees would be entitled to charge only the lowest rate of fare proposed in any of the bids, for the renewal term. If the company refused or neglected to choose a representative to take part in the appraisal upon being notified to do so, the franchise was not to be extended beyond the first thirty-year period. During the continuance of the grant, the company was to have the exclusive right of constructing and maintaining a railroad along the route described, except as limited by an elaborate rule relative to the granting of trackage rights in the downtown portion of Main street.

The grantees were required to keep the street surface in good repair inside the rails and for two feet four inches on either side. They were also to keep all dirt and filth removed from the tracks as directed by the common council from time to time. While the rails were being laid a free passage for vehicles was to be kept open, and immediately after the rails had been laid, the street surface was to be restored to its former condition. The cars were to be drawn by animals only, at a speed limited to seven miles per hour. They were to be operated as the common council should provide and as public convenience might require, but the council was not to compel them to run oftener than every ten minutes during fourteen hours of the day, beginning at six o'clock A. M. The council reserved the further right, however, to require the running of cars as often as every half hour until eleven o'clock in the evening, and as often as once an hour during the entire night. As long as the grantees complied with this requirement they were to be at liberty to run their cars as often as they chose "either on the whole length or over a portion or portions of the said road." Children under five years of age accompanied by parents were to be carried without charge. The grantees were to employ "careful, sober and prudent agents, conductors and drivers, to take charge of their car or cars, while on the road." It was made the duty of these employees, so far as practicable, "to keep a vigilant watch for all teams, carriages and persons on foot, and especially children, either upon the track or moving towards it,

and at the first appearance of danger to such teams, carriages, footmen or children, or other obstruction," the cars were to be stopped "in the shortest time and space practicable." But the grantees were authorized in their discretion to run their cars without any other conductor than a driver. Cars running in the same direction on the same track were not to approach within less than 200 feet of each other under ordinary circumstances, and cars running in different directions were not to stop abreast of each other except at stations. In case of a snowfall sufficient materially to obstruct the tracks and sufficient to permit vehicles to pass over the tracks on runners, the grantees were authorized and required "to use a sufficient number of sleighs to convey passengers, requiring a transit over their road from day to day, until the cars can be used on the tracks."

A printed copy of a number of these rules and regulations was to be kept in a conspicuous place in each car run over the grantees' road. Furthermore, the grantees were required to reimburse the city for all expenses of printing incurred by the city as a result of this grant or in preparation for making it.

The council reserved the right to make further rules, orders or regulations, as might be deemed necessary from time to time for the protection of the public. Wherever gas or water pipes had already been laid in the streets, the grantees were required to construct and maintain their railways subject to the city's rights. The gas and water companies were at their own expense to remove their pipes so as not unreasonably to injure the railway or its use, and on the other hand the council reserved the right to lay gas or water pipes or permit them to be laid in the streets occupied by the railroad, "whenever the public or private convenience may require." If the grantees failed to keep the streets in repair as required by the franchise, and neglected to make the necessary repairs after two days' written notice from the street commissioner, the council would have the right to cause the repairs to be made and to assess the expense on the grantees' property. If the grantees failed to comply with any of the rules and regulations for a space of ten days upon written notice from the common council, they were to be liable to a penalty of $25 for each violation and for each

day such violation should continue. However, in order to recover the penalties, the city was required to bring action within one month after the specific violation complained of occurred.

Rule 26, relative to trackage rights in lower Main street, had been the subject of long disputation by varied interests. As finally adopted, this rule provided that whenever the persons authorized to build a railroad in Niagara street or in any other street connecting with or intersecting Main street south of Huron street should desire to run their railroad in connection with the Main Street Railroad, or to run their cars over any portion of the Main Street Railroad south of Huron street, they should have the right to do so. They were required, however, to file with the city clerk a written certificate designating their point of intersection with the Main Street Railroad and how much of this road they desired to use. Thereafter, the portion of the Main street road so designated, was to be used in common in the manner prescribed from time to time by the council "having due reference to the quantity of travel upon each and all said railroads, and the convenience of all passengers upon the same." The company or companies securing trackage rights would be required to pay the owners of the Main Street Railroad for such rights, a sum equal to ten per cent per annum on the actual cost of the portion of the road over which trackage rights were secured. This rental was to be apportioned among the companies securing trackage rights with reference to the portions of track used by them, and also with reference to the number of cars operated by them. The cost of the portion of the Main Street Railroad subject to trackage rights was to be deemed the amount which it would have cost if built for cash. This amount was to be determined by the council from time to time, as the road was partly built, altered or added to. If the common council should fail to make any such determination for three months after being requested to do so by the grantee of any street railway affected by this rule, the amount of the cost not before determined was to be fixed from time to time by the certificate of the grantees of the Main Street Railroad, verified under oath. The owners of the Main street road were required to keep it in good repair and condition, and to reconstruct it when necessary,

but such maintenance and reconstruction were to be at the expense of the companies using the road in proportion to the number of cars run by them respectively. No other company, however, was to be permitted to use the Main street road until it had received a franchise for a railroad at least one and a half miles in length, measuring easterly or westerly from Main street, nor until it had constructed at least one mile of such railroad. Moreover, no company would have the right to operate its cars over the Main Street Railroad oftener than it operated them over the entire length of its line. Any one of these other companies which failed to complete its road for the full one and a half miles required within one year after securing a franchise would lose its claim for trackage rights on Main street. It was provided, however, that this Rule 26 should not apply to a proposed connecting railroad having a terminus on Main street south of Huron street, if the company owning the Main Street Railroad should offer to build the new road and carry passengers on it at as low rates of fare as the company was obliged to carry them for under the Main street franchise. It was further stipulated that when any cars belonging to the grantees of the Main street line should approach nearer than 125 feet to its junction with any other railroad, they should have, if then in motion, preference in passing the junction. Any car belonging to the company acquiring trackage rights, if in motion and within fifty feet of the junction, would be given preference, in passing, over any car of the Main street road not within 125 feet of the junction, or within that distance, but not in motion.

Finally, the grantees were required during the last five years of the first thirty-year period to make an annual report to the council of the operations of the preceding calendar year. This report was to be filed with the city clerk not later than January 20, and was to include the amount of the company's capital stock and the amount paid in; the amount expended for the purchase or lease of land for buildings and other purposes of the road, and for horses and cars; the amount and nature of the company's indebtedness; the amount of its gross receipts; the amount paid out for repairs, for horses, for buildings and for salaries and the service of employees; the number and amount of dividends; the num-

ber of barns, car-houses and shops, and the number of cars and horses in use; the number of miles run by the cars; the number of men employed and their occupations; the number of persons injured in life or limb, and the cause of such injuries with a statement as to whether any accidents had arisen from the negligence of any person in the companies' employment, and whether such person was still retained in the employment of the company.

421. Only citizens to be employed; minimum wage scale for workmen during construction; franchise to be renewed unless railway is purchased for municipal operation—Buffalo.—In December, 1895, the city of Buffalo granted a competing street railway franchise for about sixty-five miles of streets.[1] In view of the subsequent acquisition of this company's stock by the Buffalo Railway Company, the following provision of this franchise has a curious interest:

"The said Company shall not, during the term of years for which this franchise shall be granted, in any manner consolidate or merge its capital stock, franchise or property with the capital stock, franchises or property of any existing railroad company, or companies, operating in said city or that may hereafter be created for the purpose of operating and running a street railroad in said city."

This grant was made for a period of sixty-six years,[2] and the company was required to pay into the city treasury two and one half per cent of its gross receipts until they amounted to $2,000,000 a year, and thereafter three per cent. The company was expressly required to "keep accurate books of account of its business, earnings, receipts and disbursements, the name or names of its stockholders, officers and all its employes, the number of its cars and showing in detail and correctly" the manner in which its business was transacted, and it was also required to keep "true minutes" of the proceedings of its board of directors. It was also stipulated that "the said books and all of them" should be open at all times to inspection by the mayor or the city comptroller or any person appointed by either of them, and to the common council or any committee or person appointed by it. The com-

[1] Proceedings of the Common Council, City of Buffalo, 1895, p. 2285. *See* also Report of the Massachusetts Special Committee, 1898, *already cited*, p. 116.

[2] Most of the street railways of Buffalo are said to be operating under 999-year franchises, but the author has not had access to a complete set of the city's franchise documents to verify this claim.

pany was limited to a rate of five cents "for one continuous passage one way for transporting or conveying a passenger from any point upon said route to any other point thereon within the limits of the City of Buffalo by the shortest route operated by said company." Children under ten years of age were to be carried free. Universal transfers were to be given free on all the company's lines, but a "continuous passage" was not to be construed to include a return trip or a round trip. A passenger not desiring a transfer would be entitled, upon paying a cash fare, to a ticket and when he had accumulated four of these tickets they would entitle him to one free ride, but tickets were not to be good on the date of issue and would be void unless used within sixty days. Moreover, the company was required to be ready and willing at any time in good faith to enter into agreements with the existing street railway companies for the establishment of a general system of free transfers between them, each company to pay the others one-half the regular fares for all passengers transferred to their lines.

It was stipulated that the company should not "plow, shovel, or brush, sweep or heap up, any snow, ice or other material into piles or ridges in or upon any street, cross-walk or other public place," but in all instances the ice was to be "uniformly leveled off in front of residences and places of business . . . in such manner as not to interfere with the public travel or prevent the safe approach to any residence or place of business." The company was to provide vestibules on all its closed cars "so constructed as to afford protection against cold and inclement weather to motorman, conductor or other person or persons in charge of and operating or running such cars." It was further stipulated that "the cars of said company shall be of best style and class with corporate name of said company or the abbreviations thereof to be plainly and conspicuously painted upon the outside of its cars." The right was reserved to the board of public works and the common council to "determine and designate the method of heating, ventilating and lighting the cars of said company, which determination shall be final and conclusive, accepted by, be acted upon and complied with by said company." The right was reserved to the board of public works to require a change at any time in the method of heat-

ing, lighting or ventilating the cars, and it was stipulated that the company "shall not dispute or contest as unreasonable or illegal any direction so made." The company also agreed to abide by all sanitary rules and regulations adopted by the board of health. The company was also required "to provide open cars convenient and suitable on its entire railroad system for use in the summer season and at such times and whenever their use may be serviceable and practicable."

It was stipulated by this franchise that the company should "employ only citizens of the United States and actual residents and inhabitants of the city of Buffalo, in the performance of any of the work to be done by said company or any contractor in its employ in constructing, operating or maintaining said railroad, excepting such persons as may be required in the engineering or similar departments or in the superintendence or management of said railroad." The company was also required to pay or cause to be paid wages at the rate of at least 17½ cents per hour for all work or labor actually performed during the construction of the road. All the company's employees engaged in the construction or operation of the road were to be paid weekly.

This grant was to become operative only upon the company's filing with the city clerk "a written acceptance of all the terms and conditions thereof, expressly waiving any and all objections as to the reasonableness or legality of any of the provisions of the same or any part thereof, or as to the legal right or authority of the City to impose the same," and unless such acceptance was filed within one month after the grant had been approved by the mayor, this franchise would be void.

In 1905 the city of Buffalo granted a franchise to the International Railway Company, which now has a monopoly of the city's street railway service, authorizing the construction of an extension on Fillmore avenue.[1] The provisions of this franchise relating to the duration of the grant and the city's reserved right of purchase are especially interesting. The grant was made for a period of twenty-five years, but was not to become operative until the company had filed with the city clerk a written acceptance of all its terms and conditions.

[1] Council Proceedings, 1905, p. 2876.

The section of the franchise relating to purchase or renewal was as follows:

"At least sixty days before the expiration of this grant, the Common Council shall notify the railway company whether the City of Buffalo will take over the said railway, so that the city may operate it, or whether it will renew the grant and consent to said railway company; and if it will renew the grant and consent, then in said notice it shall specify the terms and conditions upon which it will renew this grant. If such notice is to the effect that it will take over said railway for municipal operation, then the city shall purchase the tangible property of said railway in the street, said company hereby agreeing to sell the same to the city, and in the event that no agreement is reached between it and the said city, the value thereof shall be determined by three disinterested appraisers, one to be selected by the mayor of said city, one by the railway company, and the two so chosen to appoint the third appraiser. The appraisers so chosen shall then estimate the value of said property and make a report thereon in writing, signed by said appraisers, or a majority thereof, and file the same in the office of the city clerk. The determination of such appraisers is to be final and binding upon said railway company and said city. If the city in the manner above provided offers to renew the grant, the railway company may, within thirty day thereafter, accept or reject the offer, and if it rejects the offer then the same proposition made to the said railway company may be made by the city to other railroad corporations, with the additional provision that any such other railroad corporation as shall accept the same shall purchase the tangible property of the railway company in the street, at a price to be determined by appraisers in the manner hereinbefore provided, except that one appraiser shall be appointed by the purchasing railroad corporation instead of by the mayor. And no other or different proposition shall thereafter be made to any other company until after the same has been first made to the International Railway Company and rejected by it within thirty days after notice as aforesaid."

This franchise also required the sprinkling of the portion of the street occupied by the company's tracks in such manner as to keep it "free from dust in the operation of cars" during the months of June, July, August and September. It was also stipulated that in the removal of snow from its tracks the company "shall, after the passage of its plows, level off the snow in the roadway so that snow removed from said tracks shall not interfere with vehicular traffic."

422. Compensation to city per mile of route; railway to be operated by Union labor; city's rights in the streets reserved; franchise may be repealed for violation of terms—Wheeling.—In March, 1902, the city of Wheeling, West Virginia, granted a fifty-year franchise to the City Railway Company to construct and operate a standard-gauge street rail-

way over a fifteen-page route described by metes and bounds.[1] In some of the streets covered by this grant other companies already had tracks, and the ordinance, therefore, had to specify the exact location of the new railway with reference to those already in the streets. The City Railway Company was required by this grant to pay the city for each mile of its line in the streets the sum of $300 a year for twenty years from the date when the first car should be operated over the line, and $1000 a year thereafter until the expiration of the full period of the franchise. Double tracks were to be counted as single track in estimating this mileage and switches and cross-overs were not to be counted.

It was expressly stipulated that the railway should be "operated by Union labor."

The company was required to permit other electric railway companies to use certain portions of its tracks upon terms to be agreed upon by the companies concerned or to be fixed by arbitration. It was stipulated, however, that any such agreement, whether the result of arbitration or not, should be subject to ratification by the city council, especially with reference to the fares to be charged within the city limits and to outside points by the company securing trackage rights. The City Railway Company was limited to a five-cent cash fare and six tickets for a quarter for adults within the city limits. It was not stated whether the company might charge more for children or would be compelled to carry them free.

The provision of this franchise reserving the city's right to make improvements in the streets was unusually specific and detailed. It declared that:

"The said city by its officers, agents, servants and workmen may go or enter upon the railway, switches, turn tables, track or tracks of the said railway company which may be upon any of the streets or property or grounds of the said city and on, or over or beneath the surface thereof for the purpose of making changes or repairing the drains or sewers in or upon such streets, grounds or property of said city, or for the purpose of laying or lifting, relaying or relifting or repairing water or gas pipes or conductors, of making connections therewith or for the purpose of making, repairing or altering any other improvements the city has or may wish to have or place in the said streets or grounds or other property of the said city, or for the purpose of doing any work the city desires to do and which it would be lawful for it to do in any other

[1] Ordinance passed by First Branch of Council, March 11, 1902, and by Second Branch, March 19, 1902.

street, grounds or property of the said city, as fully as though the said grants or any grants or privileges had not been made to the said City Railway Company. The said City Railway Company shall not be entitled to any compensation or damages from the said city for any losses by reason of the running of its cars being prevented, or its business being otherwise interrupted or injured by the said city while doing any such work or making any such alteration, repairs or improvements. The said city, however, shall not do or commit by needless delay or otherwise any unnecessary injury to the said City Railway Company's business in doing such work or making such repairs, alterations or improvements and said city in such cases shall also make the necessary and proper repairs to the street at its cost."

The company was required to pave between its rails and tracks with vitrified paving brick. Moreover, it was stipulated that "all streets upon which its line alone is laid, which are paved with such brick, shall be repaved, when torn up by said company, from curb to curb, the company using such brick as are taken from the street as shall be deemed suitable by the Board of Public Works for use in the repaving, and using new materials in lieu of such as are not suitable in the opinion of such Board." In like manner the company was to repave "from the nearest rail of any other electric railway company to the curb nearest to such rail" on any street then paved with brick on which the company constructed a track next to the track of another company.

This franchise provided that "it shall be unlawful for any person to utter or speak any lewd or filthy words or in any way interfere with the comfort of passengers on or in any car of the . . . company or to enter or be in any car in the state of drunkenness or intoxication." The conductors were given authority to eject from the cars any person offending against this provision, and in addition such person would be liable to a fine of not to exceed ten dollars.

It was stipulated that if the company should fail to fulfill and perform the conditions of the ordinance or to comply with its requirements, or should "do those things which it is by this ordinance prohibited from doing," the city might give the company notice of its intention to repeal the ordinance and to revoke and annul all the rights, powers and privileges granted by it to the company, stating in such notice the respects in which the company had failed to perform its obligations. After the expiration of three months from the service of such notice on the president or the secre-

tary of the company the ordinance might be repealed and the company's rights revoked. But if the company, "before such repeal and revocation and annulling," should perform its obligations so as to remove the city's ground for complaint, the city would have no power to repeal the grant. The ordinance expressly stated that nothing was granted to the company "other than the privileges herein plainly and expressly set forth and it is entitled to no right or privilege hereunder by implication."

CHAPTER XXXII.

FRANCHISES FOR ELEVATED RAILWAYS.

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423. Number and importance of elevated railways.—The cost of elevated railroad structures is so great that they cannot be built and operated at a profit except in the most congested transit centers. In fact, the only elevated railway systems of any importance in the United States are those of old New York, Brooklyn, Boston, Chicago and Philadelphia, and the one in Philadelphia is only a single line. The elevated railroads, however, are much more important than their numbers would indicate. They still constitute the typical form of local rapid transit lines. In Greater New York during the year ending June 30, 1910, the elevated railroads carried nearly 450,000,000 passengers, as against a little over 335,000,000 carried by the subway and the McAdoo tunnels and about 800,000,000 carried by all the street surface lines of the greater city.[1] In Philadelphia and Boston the elevated lines are operated by the same companies which operate the street surface lines, and accordingly they form little more

[1] Summary of Quarterly Reports of Street Railway Companies to the Public Service Commission for the First District, New York, for the year ending June 30, 1910.

than rapid transit links in the general systems of street surface transit. In Chicago alone, of the cities having elevated railroads, the lines are constructed for the most part on private rights of way, crossing streets rather than running though them.

The reason for having elevated railroads in the streets is the desirability of securing for local rapid transit lines all the benefits of a private right of way with grade crossings eliminated, without incurring the tremendous expense that would necessarily be involved in securing rights of way over private property in the heart of a great city. The advantages of the elevated railway are speed, safety and comfort in travelling. When an urban center becomes so populous that the inhabitants cannot find suitable residences unless they go farther from the business center than the ordinary street railways will carry them within the maximum time which they can afford to spend in daily travel to and from their work, it becomes necessary to adopt new modes of transit by which the difficulties of the situation may be overcome. On the other hand, the objections to elevated railroads in the streets of great cities are formidable. The iron or concrete posts or columns upon which the structures are supported constitute a serious obstruction to traffic on the surface of the street. The presence of overhead railway structures makes the surface of the street dark and disagreeable. Moreover, passers-by are likely to be annoyed by drippings from the elevated structures or by various forms of refuse that are thrown or fall to the street below. But the greatest of all objections to elevated railroads arises from the noise they create and their intrusion upon the privacy of homes situated along the streets occupied by them. It is indeed pitiful to note the way in which the elevated railways in Greater New York, running through narrow streets on a level with the upper windows of tenement houses, destroy the possibility of comfort and privacy for thousands upon thousands of people whose living conditions, at the best, are unsatisfactory. If elevated railways could always be built in the center of wide boulevards supported on heavy concrete structures, they would perhaps constitute the best possible means of rapid transit for cities that is available in the present state of the transportation art. Unfortunately, however, the congestion

that makes elevated railways necessary is in most cases due to the existence of streets so narrow that elevated structures are a nuisance in them. It is because of the existence of city canyons with towering buildings on either side and an intolerable congestion of traffic in the narrow roadways, that it becomes necessary to think of doubling the capacity of the street by installing elevated railroads. Indeed, the construction of such railroads is the first step toward the construction of two, three or four story streets, of which there has been considerable discussion during the past few years.

Elevated railways offer greater opportunities for comfort in travel than either subways or surface lines. Fresh air is easily available for the ventilation of cars, and in the summer, for the tempering of the heat, while at the same time operation is not interrupted by cross-currents of traffic or street blockades. The most important special matters to be considered in connection with elevated railways, are the width of the streets in which the structures are to be located, the character of the structures themselves with reference to their beauty and their adaptability to the lessening of noise and vibration, the location of stations, the determination of the number of tracks with reference to the operation of local and express trains, the safety devices necessary to prevent accidents, and the form of construction required to give proper drainage so as to prevent dripping to the streets below. It is also of importance to establish the relation of the elevated railways to the general transit system of the city. In many cases it will be desirable that connections be made and that free transfers be exchanged with outlying street surface lines. While independent operation of an elevated railroad system may be maintained more advantageously than independent operation of surface lines, still the logic of urban transportation demands that the elevated roads shall be operated as a part of a unified system devised for the purpose of giving the greatest accommodation to the public at the lowest possible cost of construction, maintenance and operation.

424. The first elevated railway franchises in New York.— The intolerable congestion of population on Manhattan Island has engaged the attention of the civic patriots of the American metropolis for upwards of half a century and, in more recent years, has been a matter of concern to the far-see-

ing social workers of the entire country. Over forty years ago New York turned to rapid transit railroads for relief. For many years various projects for the construction of subways and elevated roads to carry the population of New York City to and from its daily work, were exploited in the state legislature and elsewhere. The first legislative act resulting in the actual construction of an elevated railroad was passed by the New York legislature April 22, 1867.[1] This act made provision "for the construction of an experimental line of railway, in the counties of New York and Westchester." The West Side and Yonkers Patent Railway Company had already been incorporated under the general railroad law and a supplementary act of April 20, 1866, authorizing the construction of railways to be operated "by means of a propelling rope or cable attached to stationary power."[1] The act of 1867 authorized the construction of an elevated railway from Battery Place at the south end of Manhattan Island through Greenwich Street for a distance of a half mile northerly. The railway was to be operated exclusively "by means of propelling cables attached to stationary engines, placed beneath or beyond the surface of any street through which such railway may pass." The structures were to consist of a single track not more than five feet between rail centers on each side of the street, and were to be supported by a series of iron columns not more than 18 inches in diameter at the surface of the pavement, unless elliptical in form, in which case they were to occupy not more than an equivalent space. The columns were to be placed at intervals of not less than twenty feet, except at street crossings or sidings, along the curbstone line between the sidewalk and the carriageway. They were to be so placed that the center of the elevated railway track would be perpendicular to the center of the columns, The elevation of the tracks was to be not less than fourteen feet above the pavement. Whenever deemed necessary to prevent oscillation of the track, a second series of columns might be extended on the building side of the sidewalk at intervals of not less than twenty feet. These supplementary columns were to be limited to a diameter of nine inches at the ground and were to be so placed as not to obstruct any existing door or window without the consent of the owner.

[1] Chapter 489, Laws of 1867. [1] Laws of New York, 1866, Chapter 697.

From the upper extremity of this line of columns, bracers or girders might be extended to the first series of columns.

After constructing half a mile of track, the company was required to put the road into operation with a car placed on the track loaded to weigh three times the ordinary weight of the passenger car proposed to be used on the structure together with its occupants. The new road was to be tested by three commissioners, two appointed by the governor and one by the Croton aqueduct board. If these commissioners approved the structure, plan and operations of the elevated railway and found that it could be operated "with safety and dispatch," they were to certify to these facts and file their certificate with the governor, who, if he approved it, would cause it to be filed in the secretary of state's office and would transmit a certified copy of it to the mayor of the city. Thereupon, the company would be authorized to extend its railway northerly along Ninth avenue to the Harlem River.

In case the experiment was finally approved and the road extended, the commissioners would have power to authorize the constructing company to remove any obstructions along the route, and would also have power to give directions as to the removal and replacing of awning frames, signs and other objects permitted in the streets prior to that time. The commissioners would also have the right to limit the speed of the railway to a maximum compatible with public safety and to prohibit the erection by the constructing company of any structure in the public streets which would be unsafe or unauthorized by this act. The company was to have power to excavate the spaces required for the foundations of its columns, for vaults for its engines and connecting pipes and cables within the limits of the streets covered by the grant. If private vaults or improvements were interfered with, the company was to pay compensation to the owners. The company was authorized to rent or acquire buildings or portions of buildings convenient for stations for public access to the elevated road. Rates of fare were not to exceed five cents for any distance less than two miles and one cent for every mile or fractional part of a mile in addition to the first two miles. The company was expressly authorized, however, to adopt a uniform rate not exceeding ten cents for all distances on Manhattan Island, for a period of five years. The

company was required to pay a sum not in excess of five per cent of its net income from passenger traffic on Manhattan Island into the city treasury. It was also stipulated that the company should pay all damages resulting to private property by reason of the construction of its road and should file with the state comptroller a $500,000 bond to guarantee the payment of such damages and the removal of the railway structure in case the commissioners should so direct.

By a supplementary act passed in 1868, the legislature required the company to pay in the month of January and quarterly thereafter in each year, five per cent of its net income to the city comptroller "for the purpose of being expended in the improvement of the condition or appearance of the streets, or parts of streets or avenues, or places through which said railway shall be constructed; by preserving or transplanting shade trees, or by other embellishments or improvements of awnings and sidewalk structures which may tend to render the condition and general appearance of the streets, aforesaid, satisfactory to the citizens dwelling in, or frequenting the same."[1] It was made the duty of the company before opening its railway for public use to file with the city a bond in the penal sum of $100,000 conditioned upon the true and faithful payment of the revenue "in amount and manner" as just set forth. Moreover, it was stipulated that this payment "shall be the legal compensation in full for the use and occupancy of the streets by said railway as provided by law, and shall constitute an agreement in the nature of a contract," entitling the company and its successors to the privileges and rates of fare already described, "which shall not be changed without the mutual consent of the parties thereto." The compensation mentioned was to be considered as covering all claims for the removal of obstructions and structures found on the street line of the railway owned by companies or individuals, and where awnings or other structures were removed, they could be replaced only on permit of the commissioners referred to in the original act under general rules and regulations adopted in the plans for improving the condition or appearance of the streets. Where vaults had been placed under the surface of the streets by abutting owners in accordance with permits

[1] Laws of New York, 1868, Chapter 855.

from the city for which they had paid, the company was to repay them for the actual cost of their improvements or for such part of the improvements as the company displaced.

The experimental road was constructed, the commissioners were appointed and certified their approval of it to Governor Fenton, who in turn approved their report on July 2, 1868. After a short trial, the use of propelling cables as motive power proved impracticable, and the company went into bankruptcy. In 1871 its property and franchises were acquired by the New York Elevated Railroad Company which discontinued the use of cables, and substituted "Locomotive Engines, propelled by steam, known as Dummies" as a motive power.

On January 1, 1875, a constitutional amendment went into effect in the state of New York forbidding the legislature to authorize the construction of a street railroad without the consent of the local authorities and the consent of the abutting property owners, or if that could not be obtained, then the consent of the supreme court at its general term. The legislature of 1875 passed an act, however, confirming to the New York Elevated Railroad Company all the privileges and franchises of its predecessor and requiring it to construct and complete at least one track with turnouts and sidetracks of its elevated railroad within five years after the passage of this act.[1] The commissioners appointed under the original grant of 1867 were continued and the company was authorized to adopt "such alterations and improvements in the structure, rolling stock, motor power and its application, and in the position, grade, elevation and depression of the tracks and the mode of securing and strengthening its said railroads, sideways, crossings, stations and turnouts," as these commissioners, or a majority of them, might authorize or approve. This act specifically authorized the company to charge a fare of ten cents for any distance up to five miles and, with the consent of the city, not exceeding two cents for each additional mile or fraction of a mile.

By a special act of 1872, the Gilbert Elevated Railway Company was incorporated and authorized to construct an elevated line along a route in the city of New York to be laid

[1] Laws of New York, 1875, Chapter 595, passed June 17, 1875.

out by five commissioners named in the act.[1] This company had a new scheme. It was authorized to construct and operate "tubular ways and railways by atmospheric power, compressed air, or other power." The company's railways were to be constructed "in the most thorough and artistic manner," and at such heights above the streets as would insure "unimpeded traffic and travel" in them. The "tubular ways and railways" which the company was authorized to construct, were to be "substantially supported above the middle of the streets and avenues by iron arches, which shall span the same from curb to curb, the basis of which shall not, when practicable, be more than sixty feet apart, nor the arches less than fifty feet from each other." The company was authorized to make excavations in the streets in order to secure the foundations for its structures necessary for "perfect safety and stability" of construction. The company's excavations were not to interfere in any way with the sewers, gas pipes or water mains already in the streets. The company's "ways and railways" were to be exclusively for its own uses. The municipal authorities of the city were expressly prohibited from permitting any other person or corporation to do the things authorized by this act. Any person who wilfully or maliciously injured or destroyed any of the company's structures or obstructed its railways was to be guilty of a misdemeanor and be subject to both fine and imprisonment and also was to forfeit triple damages to the company. On this company's lines a maximum fare of ten cents for any distance less than four miles was to be permitted, with two cents more for each mile or fractional part of a mile of additional distance, but the company was required to run special cars and trains between five and eight o'clock both morning and evening in which the fares were not to exceed one-half the rates just named. The company was authorized but not required to issue transfer tickets, good on surface roads, railways or ferries on terms to be agreed upon with other corporations. The fare charged, however, was not to exceed the sum total of the fares which the individual corporations were authorized to charge. The commissioners appointed to lay out this company's route designated Sixth and Second avenues with connecting streets in the lower part of Man-

[1] Laws of New York, 1872, Chapter 885.

hattan Island, for the construction of the company's lines. The name of this company was changed in 1878 to the Metropolitan Elevated Railway Company.

425. The New York rapid transit act of 1875.—The construction of elevated railroads in old New York had proceeded slowly and with difficulty under the special acts of the legislature passed prior to 1875. In view of the fact that the constitutional amendment to which reference has already been made forbade the continuance of the policy of special legislation in granting street railroad franchises, the New York legislature on June 18, 1875, passed what is known as the first rapid transit act, entitled "An Act further to provide for the Construction and Operation of a Steam Railway or Railways in the Counties of this State." [1]

"Whenever it shall appear," runs this act, "by the application of fifty reputable householders and taxpayers of any county in this State, verified upon oath before a justice of the Supreme Court, that there is need in such county of a steam railway or railways for the transportation of passengers, mails or freight, the board of supervisors of said county may, within thirty days after presentation to them of such application, duly verified as aforesaid, appoint five commissioners, who shall be residents of the said county, and who shall have full power and authority to do and provide all that they are hereinafter directed to do and provide. * * * But whenever any such proposed railway shall be wholly within the limits of any city of the State, then such application shall be made only to the mayor of said city, and such mayor shall appoint such commissioners as aforesaid."

Within fifteen days after their appointment, the commissioners were to organize as a board, and within thirty days after their organization they were to determine upon the necessity of the steam railway or railways for which an application had been made. In case they found such railways to be necessary, they were required within sixty days after organization to fix and determine the routes. They were given exclusive power to locate such routes, "over, under, through or across the streets, avenues, places or lands in such county," except that they were expressly barred from laying out a railway in the city of New York on Broadway or Fifth avenue below 59th street, or in Fourth avenue above 42nd street or in the city of Buffalo between Michigan and Main streets. Moreover, they were not authorized to lay out new railways on streets already legally designated for the main line

[1] Laws of New York, 1875, Chapter 606

of elevated or underground railways then in actual operation. It was specifically provided, as required by the constitution, that the consent of the owners of half the abutting property as well as the consent of the local authorities having charge of the streets should first be obtained, or, in case the consent of property owners could not be obtained, the determination of three commissioners appointed by the general term of the supreme court and confirmed by the court to the effect that the railway ought to be constructed, was to be secured. The commissioners thereupon were to invite the submission of plans for the construction and operation of the proposed railway "under such conditions and with such inducements as to them may seem most expedient." Proposals were to be received at a date fixed in the public notice not more than ninety days after the organization of the commission, and the commissioners were to "decide upon the plan or plans for the construction of such railway or railways with the necessary supports, turnouts, switches, sidings, connections, landing places, stations, buildings, platforms, stairways, elevators, telegraph and signal devices, or other requisite appliances upon the route or routes, and in the locations determined by them." Within a like period of ninety days the commissioners were to fix the time within which the proposed railway should be constructed and ready for operation, together with the maximum rates to be charged and the hours during which special cars or trains were to be run at reduced rates. They were also to prepare appropriate articles of association for the incorporation of a company, and within one hundred and twenty days after their organization were to open a suitable book of subscription to the company's capital stock. As soon as the requisite amount of stock had been subscribed the commissioners were to call a meeting of the stockholders to appoint directors and organize the company. Thereupon, the rapid transit commissioners were to deliver to the directors of the company a certificate setting forth the articles of association and the organization of the company, and within five days thereafter the company's corporate papers were to be filed with the secretary of state and the county clerk.

The company so organized was to have authority to enter upon the streets, public places and lands designated by the commissioners and to construct, maintain and operate rail-

ways there in accordance with the plans adopted by the commissioners. Moreover, every conductor or other servant of the company employed on a passenger train or on a station for passengers was to wear on his hat or cap a badge indicating his office and the initial letters of the "style of the corporation" employing him. Without such badge no conductor or collector was to have any right to demand or receive any fare or ticket or meddle with any passenger, his baggage or property. Any company organized under this act was required to convey United States mails upon request of the Postmaster-General. In case the company could not agree as to the rates for the transportation of mails and as to the time, rate of speed and manner and condition of carrying mails, the governor of the state was to appoint three commissioners to fix the price, terms and conditions, but such price was not to be less for carrying mail in regular passenger trains than what the company would receive as freight charges on an equal weight of merchandise transported in its "merchandise trains," plus a fair compensation for the post-office car. If the Postmaster-General should require the mails to be carried at other hours or at higher speed than the passenger trains were run, the company was to furnish a special mail train, for extra compensation.

It was provided that in case any route determined upon by the rapid transit commissioners should coincide with the route of an existing company formed for the purpose of operating a rapid transit road, if such company had not already forfeited its charter, then it should have the same authority to construct and operate its railway upon the fulfillment of the requirements and conditions imposed by the commissioners, as a company specially formed under this act would have. It was also provided that the commission might lay out routes by which any elevated steam railway then in actual operation could connect with other steam railways, or with steam ferries. It was further stipulated that within one month after a company had been organized under this act, the commissioners should transfer and deliver to it "all plans, specifications, drawings, maps, books and papers in their possession." Under this act, accordingly, a remarkable policy was established in response to the public demand for the construction of rapid transit lines. Commissioners were

appointed by the duly constituted authorities to lay out routes and organize a company to build them. Thereupon, all of the original records of the commissioners were to be turned over to the new company and it was to be sent on its way rejoicing forever in the possession not only of public rights, but also of the original records upon which such rights were based.

426. The Manhattan Railway Company's franchise.—It was under the rapid transit act of 1875 and in accordance with the procedure just described that the Manhattan Railway Company was incorporated. This company's routes as laid out by the board of rapid transit commissioners covered nearly all the elevated lines in Manhattan as now constructed including the routes of the New York Elevated Railroad Company and the Gilbert Elevated Railway Company previously laid out. There were embodied in the company's articles of association not only the resolutions of the board of rapid transit commissioners describing the routes over which the company's lines were to be constructed, but also the resolution adopted by the commissioners prescribing in detail the general plan of construction, the times within which the several branches of the road were to be built and the terms and conditions of subsequent operation.[1] In general the company was given considerable latitude, according to the width of the various streets to be occupied by it, in the choice of a particular type of structure to be used. On streets having a width of not more than 36 feet between the curbstones, the company was authorized to erect a row of columns on the line of each curb with a superstructure carrying two tracks upon transverse girders spanning the streets; or to erect a superstructure carrying a single track over each row of columns; or to erect Gothic transverse arches spanning the roadway from curb to curb and carrying longitudinal girders. In streets having a width between curbs of 55 feet or more, the company might if it chose erect two rows of columns in the roadway, but it would not be authorized in any case to place a column between two street railway tracks on the surface of the roadway. Columns placed at the curbline were to be erected within the line of curbstones and so

[1] "Statutes and Documents affecting the Elevated Railways in the City of New York," pp. 139–146.

placed as not to obstruct vehicles and ordinary traffic in the roadway. Not more than two rows of columns and not more than two tracks were authorized in any one street except as expressly provided in the grant. Every cross street having a width of less than fifty feet was to be spanned by a single span in all cases where the rows of columns were upon the curblines. If the rows of columns were in the roadway, no column could be erected within the curbline of a cross street elsewhere than on the center line of such street. Where columns were erected in the roadway on either side of a railroad track, the distance between the rows of columns was to be at least twenty-one feet in the clear. The transverse diameter of any column placed in the roadway of a street was not to be more than fifteen inches at the base and for at least ten feet above the surface of the roadway. A column placed on the curbline was not to be more than twenty-six inches in diameter for a distance of ten feet above the surface of the street. It was provided, however, that adequate fenders should be fitted around the base of each column placed in the roadway "to prevent the hubs of the wheels of passing vehicles from striking the column." The longitudinal distance between columns placed on the curblines was to be at least twenty-five feet, and if both rows of columns were in the roadway the longitudinal distance between columns was to be at least thirty-five feet. The superstructure was to be at least fourteen feet above the level of the street "except on a summit, where, when necessary, on account of grade, the height of the lowest part of the girders, above the roadway of the street, may be reduced to twelve feet." Upon every track there were to be two continuous longitudinal stringers of the best quality and kind of timber suitable for the purpose. This requirement might be fulfilled either by placing stringers under the rails or by "safety guards of timber." The purpose of the stringers was in any case to "tie the structure firmly together and give it stiffness in a longitudinal direction." The materials that might be used in the various parts of the structure were specified. The wrought-iron used was to be "tough, highly fibrous, and of a quality which shall be in every respect equal to that used in first-class American iron railway bridges." The requirements of the structure as to strength and solidity were prescribed in detail. The

company was to provide sufficient safeguards effectually to prevent cars in case of accident from leaving the structure. The best form of continuous brakes arranged so as to be under the control of the engineer was to be applied to all trains and to every car in each train. The rails were to be of steel and not less in weight than fifty pounds to the yard. It was stipulated that in the laying of the rails, "great attention must be given to the rail joints." The railway was to be equipped with the most approved system of signals to guard against accidents. The stations were to be arranged so as to be convenient of access from the streets. The station platforms were to be on a level with the platforms of the cars. Every station was to have ample space under cover for the accommodation of passengers. The stairs and all parts of the stations, except the platform, doors, windows and inside sheathing and the tread of the stairs, were to be of iron. The wheels of the cars were to be fitted with the best known devices for "deadening noise and preventing jars." The company was given authority to construct "such supports, turnouts, switches, sidings, connections, landing-places, stations, buildings, platforms, stairways, elevators, telegraph and signal devices and such other requisite appliances, . . . as shall be proper for the purpose of rapid transit railways, and as shall be necessary to meet the requirements of the traveling public." The elevated structure was to present "a substantial and tasteful appearance." All materials used were to be of the best quality for their purpose and the work was to be executed "in the best style of the arts, and in a workmanlike manner."

The company was required to run special "commission" trains or cars daily between 5:30 and 7:30 o'clock in the morning and between 5 and 7 o'clock in the afternoon. It was stipulated that such cars or trains "shall be in numbers sufficient to accommodate the public and the laboring classes during the hours indicated, and shall be run at intervals really to afford such accommodation." These trains were to stop at all regular stations and were to be run at the same rate of speed as other local trains. The rate of fare on these special trains was not to exceed five cents from the Battery to Fifty-ninth street, seven cents from the Battery to the Harlem River or eight cents for a through passenger from the

Battery to Highbridge. During the hours when these cars were to be run, a seat was to be provided in a "commission" car for every passenger on the train who desired to travel in one of them; otherwise, any passenger demanding a seat in such a car would be entitled to occupy a seat in another part of the train upon payment of the reduced rate of fare charged on the "commission" cars. The regular rates, except on the commission cars during the hours mentioned, were to be not more than ten cents for any distance under five miles and two cents for each mile or fraction of a mile in excess of five miles, but the entire fare was not to exceed fifteen cents for through passage from the Battery to the intersection of Third avenue and the Harlem river or seventeen cents from the Battery to Highbridge. Except in the rush hours any passenger demanding a seat on one of the company's ordinary cars would be entitled to travel without payment of fare unless a seat was furnished him. The company was authorized to furnish as a part of any train, one or more "saloon cars" or "drawing-room cars" with special arrangements for extra comfort and space. Any passenger occupying a seat in one of these special cars when he could have taken a seat in another car, might be charged "an extra (though not unreasonable) rate of fare."

The elevated roads in Manhattan were actually constructed by the New York Elevated Railroad Company and the Metropolitan Elevated Railway Company, but the terms and conditions prescribed in their rapid transit franchises were substantially identical with those of the Manhattan Railway franchise just described.

On May 20, 1879, the Manhattan Railway Company entered into a tripartite agreement with its two rivals, by which it acquired a lease of the roads of the other companies for 999 years. Later the other companies, as well as the Suburban Rapid Transit Company under whose charter elevated railroad extensions were constructed in the Bronx, were finally merged into the Manhattan Railway Company, which thus became the sole owner of elevated railroad lines in old New York. Steam was used on the Manhattan Railway until 1902, when the elevated railroads were electrified, and on January 1, 1903, the company's lines were all leased for a period of 999 years to the Interborough Rapid Transit

Company, which operates them in connection with the subway.

All differentiations in rates were given up in 1886 and a uniform five-cent fare is now collected on the elevated lines. Moreover, free transfers are given from one line to another at intersecting points. Late in 1910 the Manhattan Railway Company applied to the public service commission for a franchise to third-track its principal lines, the third-tracking having been partly done years before without valid franchise authority for it.

427. Elevated railway franchises in Brooklyn.—The franchises of the existing elevated railways in Brooklyn begin with a special act of the New York legislature passed May 26, 1874, incorporating the Brooklyn Elevated, Silent, Safety Railway Company.[1] By this act the company was authorized to construct, maintain and operate an elevated railway from Fulton Ferry and the eastern terminus of the Brooklyn Bridge then under construction, through various streets including Lexington avenue, to East New York and thence to Woodhaven in the town of Jamaica. The construction of "such turnouts, sidings, stations, platforms, depots, stairways, telegraph and signal apparatus and repair shops as may be necessary and proper for the successful maintenance and operation" of the railway was authorized. The company was also authorized "to convey passengers, mails and merchandise, in cars to be propelled by steam or other motive power, for pay." The rate of fare for passengers was not to exceed five cents for the first two miles with a further charge of one cent a mile for additional distances. Iron columns to support the elevated railway structure were to be placed on each side of the street at the curbline. These columns were to be "firmly bolted to concrete foundations of suitable size and shape to insure perfect firmness in all cases." Transverse iron girders not more than 36 feet long were to be placed across the street attached to the tops of the columns. The railway was to have an elevation of at least fourteen feet from the surface of the street, and the structure was to be strong enough to insure "a safe support for trains of cars and motors of a maximum weight of 12,000 pounds each, and a train on each track running at a speed not to exceed

[1] Laws of New York, 1874, Chapter 585.

thirty miles per hour." There was to be "no decking or flooring made use of to obstruct light and ventilation, except the necessary platforms at the stations," but when required by the local authorities, the company was to "cause blinds or screens to be put on said railway for the purpose of preventing horses, while standing or passing beneath, from seeing the cars and motors in motion." Such blinds or screens were to be so constructed as to allow free circulation of light and air. It was provided that "there shall be no steam, smoke, ashes or cinders allowed to escape from the motors while in motion." The rail beams of the railway and the running gears of the cars and motors were to be so constructed and adapted to each other as to preclude the possibility of the cars or motors leaving the tracks. It was further provided that "suitable means or devices shall be made use of to cause the rails and the wheels of the cars and motors to be as non-sonorous as possible." The railway was to have two tracks, and construction was to be begun at the suburban end of the line. The company was authorized to open the streets to secure the necessary foundations for its columns or other structures, but the character and location of all such foundations within the boundaries of the city of Brooklyn were to be subject to the inspection and approval of the chief engineer of the board of city works. Moreover, such foundations were not to interfere in any way with public sewers or the gas and water mains. The legislature specifically reserved the right at any time to alter, amend or repeal the act. The company was required to commence the construction of its road within two years and complete it within three years thereafter, or forfeit its rights.

On May 22, 1875, the legislature passed an act changing the name of this company to the Brooklyn Elevated Railway Company and amending its charter in certain particulars relating to the method of construction of the elevated structure.[1] The limitation of the cross-girders to a length of 36 feet was removed. The provision for constructing blinds or screens for the protection of horses, was left out, and the requirement that construction should begin at East New York was omitted.

The rates of fare to be charged on the Brooklyn Elevated

[1] Laws of New York, 1875, Chapter 422.

Railway were changed by another amendment of the company's charter passed June 13, 1885.[1] Under this act five cents was fixed as the maximum rate for each passenger between half-past five and half-past eight in the morning and between half-past four and half-past seven in the afternoon. At other times the fare was not to exceed ten cents, but the company was authorized to make special rates for funeral trains.

It is noteworthy that the company's original legislative charter, although describing a specific route, reserved to the mayor and the common council of the city of Brooklyn, the right to designate other streets or avenues "as being more suitable for carrying out the objects contemplated in the erection of said elevated railway." On account of this reservation, the Brooklyn common council was enabled on several different occasions to change the company's route as difficulties arose during the process of construction requiring a readjustment of the route to traffic or operating conditions.

Several other elevated railway companies were incorporated subsequent to 1875 under the terms of the general rapid transit act by boards of commissioners appointed by the mayor of Brooklyn. Among these companies was the Kings County Elevated Railway Company incorporated January 6, 1879. The terms and conditions embodied in its articles of association were very similar to those embodied in the articles of association of the Manhattan Railway which I have already described. In Brooklyn, however, the consent of the common council as the local authority having control of the streets under the constitutional amendment of 1875, was not given as a merely formal matter. The council assumed to attach terms and conditions of its own in granting its consent, so that we have to consider not only the provisions of the company's articles of association, but also the provisions of the consent or franchise which it acquired from the common council by a resolution adopted December 28, 1883. It was provided as a condition of this consent that unless the work of construction on the routes enumerated should be actually commenced by September 1, 1884, and unless the several railways described should be completed and in active operation within two years thereafter, "this consent shall be and

[1] Laws of New York, 1885, Chapter 539.

become thenceforth wholly inoperative and nugatory as respects the portions of the routes of such railway or railways that shall not have been so completed and in actual operation." Provision was made, however, for an extension of time if made necessary by hostile legal proceedings. The council also imposed the condition that the company should pay into the city treasury two per cent of its gross receipts after the expiration of five years from the commencement of operation, but the company was not to be required to make any further or other payments into the city treasury except in discharge of taxes, assessments or water rates lawfully levied upon its property. The council also imposed as a condition of its consent a requirement that if any other properly authorized company should construct and operate an elevated railway intersecting this company's lines at any point within one mile of the ferries at the foot of Fulton street or Broadway, the portion of this company's railways extending from such point of intersection to either of these ferry terminals or to the Brooklyn Bridge might be jointly used by the two companies on terms to be agreed upon between them, or in the event of disagreement, to be fixed by commissioners appointed by a general term of the supreme court. With the view of protecting the city against such damage as it might sustain in case the work of construction on any of the company's railways should be commenced, but not completed within the time specified, the council required that before commencing the work of actual construction the company should "deposit in escrow with such trust company in the city of Brooklyn or New York, as shall be designated therefor by the mayor of this city, so many of the bonds of the said company, forming part of the issue of its bonds that shall be secured by a mortgage that shall be the first lien upon the company's properties, rights, powers, privileges and franchises, as shall have the par value of one million dollars, with all coupons or warrants for interest thereto attached that shall mature subsequent to September 1, 1886." The bonds so deposited were to be returned to the company at the rate of $100,000 as each mile of structure was fully completed, and the entire amount remaining in escrow was to be returned upon the actual completion and the commencement of operation of any one system of railways extending from

the Fulton Ferry or from the Brooklyn Bridge to the city limits. In case the company failed to complete a system of railways and put them in operation within the period specified, the bonds remaining in escrow were to be delivered to the commissioners of the sinking fund of the city of Brooklyn and were to be disposed of by them so far as necessary fully to indemnify and protect the city against damages arising from the partial construction but the actual non-completion or operation of the railways.

Some of the conditions imposed upon the Kings County Elevated Railway Company by an earlier resolution of the common council passed June 30, 1879, were declared invalid by the court of appeals a few years later.[1] Referring to the terms and conditions imposed by the rapid transit commissioners in laying out the company's route, the court said:

"Neither the company when organized, nor the common council could add to, or take away from the terms or the conditions before provided and imposed by the commissioners."

As a result of this decision, the validity of the terms and conditions imposed by the common council of Brooklyn in the franchises of the various elevated railway companies, is doubtful.

428. Elevated railway jobbery in Pennsylvania.—On May 29, 1901, two important street railway bills were introduced into the Pennsylvania legislature.[2] The constitution of Pennsylvania requires that every bill must be read in place, presented to the chair, referred, reported from committee, printed and read on three separate days. Mr. Clinton Rogers Woodruff, Secretary of the National Municipal League, states that these bills were introduced in the Senate at three o'clock in the afternoon, were reported from committee within five minutes, and by 8:50 P. M. of the same day were printed and on the senators' desks. By 9 o'clock that evening the bills passed first reading. The next day was Memorial Day, but that did not prevent the state senate from being in session to put the bills through second reading.

[1] *See* case entitled "In the Matter of the application of the Kings County Elevated Railroad Company to acquire title to lands of Ernst Nathan," 105 N. Y. 97, decided March 22, 1887.

[2] *See* "Recent Street Railway Legislation in Pennsylvania and Philadelphia," by Clinton Rogers Woodruff, published in *Municipal Affairs*, June, 1901.

On Friday, May 31, they were passed by the Senate. On the following Monday, June 3, they were received by the House and were immediately referred to the committee on corporations. In violation of the rules of the House, this committee sat during the session and, by a trick, unanimous consent was secured for the immediate report of the bills, before the House knew what was going on. That evening the bills passed first reading in the House. The next day they were amended and on the following day, June 5, they were finally passed by the House. Two days later at midnight, without a public hearing and in the executive mansion, the governor signed the bills in the presence of United States Senators Quay and Penrose, Messrs. R. R. Quay, Clarence Wolf, J. P. McNichol, George T. Oliver, and a number of other politicians and capitalists of Philadelphia and Pittsburgh. Between seven o'clock and ten o'clock the next morning, June 8, thirteen applications for charters for railroads in Philadelphia were filed with the secretary of the commonwealth. All of the thirteen were for elevated or rapid transit companies and all were incorporated by the same persons. On the same day, June 8, a special meeting of the select council of Philadelphia was called for the following Monday, June 10. When select council met, thirteen ordinances were introduced granting franchises to the thirteen companies which had been incorporated two days before. The ordinances were immediately referred to the street railway committee which reported them favorably on the next day. On the day following they were finally passed by select council and transmitted to common council which ratified them before adjournment. On the following day, June 13, the ordinances were transcribed and sent to the mayor for his consideration. During the day Mr. John Wanamaker sent his private secretary to the mayor with a letter offering to pay the city $2,500,000 for the franchises which councils had just passed. The mayor threw the letter aside without examining its contents, and signed the ordinances that day.

One of the thirteen companies for which the legislation of June 7, and the ordinances of June 13 were passed, was the Market Street Elevated Railway Company, whose entire capital stock is now owned by the Philadelphia Rapid Transit Company.

429. Companies to take what they want, keep others out and then abandon the lines not built—Pennsylvania.—One of the acts forced through the Pennsylvania legislature with such astonishing rapidity authorized the incorporation of companies "for the purpose of construction and operation of passenger railways, either elevated or underground, or partly elevated and partly underground for the transportation of passengers and with power and authority to contract for and to locally gather, carry and distribute the mails of the United States."[1] Any company organized under this act was authorized to construct such portion of its road upon the surface as might be reasonably necessary for terminals and connections between its underground and elevated sections. It was provided, however, that not more than 2500 feet at a stretch could be so constructed on any public street, highway or bridge on which any other company incorporated under this act had already constructed or been authorized to construct a railway. A company incorporated under this law was authorized to occupy so much of the streets, highways or bridges mentioned in its charter as might be necessary for the erection and operation of its railway. Streets on which surface street railways were already constructed or authorized could be used. The company could exercise the right of eminent domain for the purpose of constructing its road and the necessary stations and approaches. The act also provided that every company incorporated under it should have authority "to use so much of the streets, highways and bridges of this commonwealth, immediately adjacent to their tracks, as may be necessary and proper, either for the erection of stations or the proper, necessary and convenient approaches thereto, or both." It was provided that any company proposing to construct a railway or an extension under the provisions of this act should commence construction in good faith within two years after the consent of the local authorities had been obtained, and should complete its road within five years thereafter, unless its time should be extended by the local authorities. It was stipulated that "whenever a charter shall be granted to any corporation to build a road as provided by this act, no other charter to build a road on, over, under, across through or along the

[1] Pennsylvania Laws, 1901, p. 523.

same streets, highways, bridges or property shall be granted to any other company, within the time during which, by the provisions of this act the company first securing the charter has the right to commence and complete its work; Provided, that the consent of the local authorities shall be promptly applied for, and shall have been obtained within two years from the date of the charter."

On June 20, 1901, two weeks subsequent to the passage of the act just described and one week after the thirteen Philadelphia companies had secured their franchises, another act was passed by the legislature to protect these companies from any possible competition.[1] By this supplementary act, it was provided that "hereafter no letters patent shall be issued to any company, nor shall any corporation be otherwise created, for the construction of an elevated or underground, or partly elevated and partly underground, passenger railway, except the same shall be located upon, over, under, across, through or along a street, road or highway in a thickly populated locality, where the surface travel is congested; nor unless and until the necessity for the construction and operation of said railway shall have been passed on and approved by a board, consisting of the governor, the secretary of the commonwealth and the attorney-general, after thirty days' public notice."

The act of June 7, 1901, as amended March 25, 1903, also provided that companies incorporated under it should have the right to construct branches and extensions after filing with the secretary of the commonwealth properly approved resolutions describing the proposed new routes.[2] Moreover, with the consent of the local authorities, a company was authorized "to abandon any portion of its road, without prejudice to its right to operate or complete and operate the remaining portion of its railway," a certificate of such abandonment being filed in the office of the secretary of the commonwealth and also with the proper local authorities. Companies incorporated under this act were also authorized by mutual consent to use each other's tracks or to arrange that one company should have the exclusive use of another company's tracks. The companies were given the right to merge whenever the directors and stockholders thought it

[1] Pennsylvania Laws, 1901, p. 577. [2] Pennsylvania Laws, 1903, p. 52.

would be for their mutual interest to do so. Whenever two or more roads had been merged, the commencement of work on any part of the route of any of the merged roads would be held to be a commencement upon all of the merged roads within the meaning of the law, but the work on all the roads was to be completed within five years unless extensions of time were granted by the local authorities.

430. The Market Street Elevated Railway franchise—Philadelphia. — The franchise of the Market Street Elevated Passenger Railway Company is the only one of the thirteen granted by the city of Philadelphia on the historic thirteenth day of June, 1901, under which construction has taken place. Under this ordinance and its subsequent amendments, the elevated railway on Market street extending from Sixty-ninth street in West Philadelphia to the Schuylkill river where it connects with the Market street subway was constructed. The original ordinance authorized the construction of a double track elevated road on Market street from Delaware avenue to the county line, with two or three branches. The franchise stipulated that the road should "be so built or means be provided under the structure, . . . its entire length, so as to catch all dripping and falling substances." The company was authorized to construct "at all necessary and convenient places, such sidings, switches, turnouts, supports, connections, landing-places, platforms, stations and all necessary appliances thereto, buildings, telegraphs and signals and all other requisite and convenient appliances . . . as shall be required for the convenience and rapid and safe operation of their road." The telegraph lines were to be attached to the structure itself, and the city reserved the privilege of attaching its wires to the structure "without cost and compensation." With the consent of the company, the telegraph wires of other companies might also be attached to the structure. Stations on the entire line were to be not more than half a mile apart, and no siding, turnout or any part of the road over a public highway was to be used for the storage of cars. The motive power was to be electricity, or any other power except steam, as the company's board of directors might from time to time determine. The railway was to be elevated upon iron piers, leaving a clearance of not less than fourteen feet everywhere and of not less than twenty feet

at steam railroad crossings. The railway was to be built "upon the best methods of deadening sound, and as nearly as practicable in the center of the street. All sewers, gas and water pipes, pavements, sidewalks and other municipal property were to be preserved and if disturbed were to be restored to a condition satisfactory to the director of public works. Private vaults under the footways and all other private property were to be interfered with and damaged as little as possible. In case the city changed the grade of any street in which the railway had been built, the company was to conform its structure to the new grade so as to preserve the clearance required by this ordinance.

It was stipulated that at all times cars should be run over the entire route stopping at all stations at intervals of not more than five minutes between six o'clock and nine o'clock in the morning and between four-thirty and seven o'clock in the afternoon, and at intervals of not more than ten minutes during the remainder of the twenty-four hours, except between one o'clock and five o'clock in the morning. The rate of fare within the limits of the city was to be not more than five cents for a continuous ride. Work was to be begun within two years and completed over the entire route within five years after its commencement. If work was not begun in good faith within the required period and "pushed with reasonable despatch," the ordinance was to be null and void. Plans of the railroad, the location of the piers, abutments and columns in the streets and all places for bridges, viaducts, stations, supports and approaches within the street lines, were to be submitted to the director of public works for his approval. The company was required to file a bond in the sum of $100,000 conditioned on the observance of the terms of this franchise, and before the ordinance took effect the company was to enter into a contract with the city to perform the requirements of the ordinance. Finally, the company was required to pay the city $50 to cover the cost of printing the ordinance.

The Market Street Elevated Railway franchise is perpetual. Although under the contract of July 1, 1907, between the city and the Philadelphia Rapid Transit Company, the city has reserved the right to take over the property of the Rapid Transit company at the end of fifty years, it is to

be noted that in case of purchase the city would acquire control of the Market street railway only through stock ownership and subject to outstanding indebtedness. If the Rapid Transit company should find it desirable at any time prior to the expiration of the fifty-year period, to let the Market Street Elevated Railway be sold under foreclosure to the bondholders, it does not appear that the city would be able to prevent it from taking such a course. The terms and significance of Philadelphia's street railway contract of 1907 have already been described in a preceding chapter.

Whatever may be said of Philadelphia's franchise policy, it must be admitted that the Market Street Elevated Railway is a superior piece of physical construction. Instead of the open, noisy structure in use in New York, it has a solid well ballasted roadbed.

431. The Boston Elevated Railway and its perpetual franchises.—The Massachusetts legislature has made an exception to its indeterminate franchise policy in the case of the elevated railways of Boston, which have been constructed under two special acts, one passed in 1894 and one passed in 1897.[1] By the first of these acts, which was approved by the governor July 2, 1894, and accepted by the people at a special election July 24, 1894, Joe V. Meigs and certain others were incorporated under the name of the "Boston Elevated Railway Company." This company was given authority to "construct lines of elevated railway according to the plans or systems shown in the patents granted to Joe V. Meigs, or according to such other plans or systems, except the system now in use in New York, known as the Manhattan system, as the board of railroad commissioners may approve," upon certain enumerated streets and public places in Boston and Cambridge. The company was not authorized. however, to do any work in any city until the streets through which the railway was to be laid should be approved by the mayor and aldermen. The company could do no work on any new bridge mentioned in the description of its routes, until the location and plans for the bridge had been approved by the board of harbor and land commissioners. The company was authorized to alter the locations described, with the approval of the

[1] *See* "Legislation, Court Decisions, Contract for the use of the Subway," etc., Boston Transit Commission, 1905, pp. 16, 33; Chapter 548, Statutes of 1894, and Chapter 500, Statutes of 1897.

mayor and aldermen, and was also authorized to construct "such branches, spurs, sidings, turnouts, connections, deflections, switches, extensions and loops in connection with any of its locations as may be authorized by the board of railroad commissioners." It was stipulated that the location, construction, maintenance or operation of its lines in any public or private way should "be deemed an additional servitude and entitle lessees, mortgagees and other parties having an estate in such way, or in premises which abut thereon, and who are damaged by reason of the location, construction, maintenance and operation of said lines of railway, to recover reasonable compensation." Claims for damages might be filed against the company at any time within three years after the construction of the railway upon or in front of a property owner's premises. Either party to the suit would have the right to demand a jury trial. The finding was to be on two questions:

"First, Has the petitioner's establishment been damaged more than it has been benefited or improved in value by reason of the location, construction, maintenance or operation of such railway? Second, If so, how much? If the answer to the first question shall be 'no,' a verdict shall be rendered for the corporation; otherwise a verdict shall be rendered for the petitioner for the amount found in answer to said second question, including interest from the day of the filing of the petition."

The company was authorized to locate stations at convenient points, with suitable exits and approaches to and from the streets, but no part of the stations, except the platforms and approaches to the platforms from buildings, was to be located in any public way not more than sixty feet wide, or in any other public way unless approved by the mayor and aldermen. This provision was amended in 1897 by removing the absolute prohibition in the case of streets not more than sixty feet wide and leaving the matter subject to the approval of the local authorities in all cases, without reference to the width of the street. By the act of 1894 the company was given the right of eminent domain to obtain land for its use. Before commencing the construction of any line of elevated railway, the company was required to deposit with the state treasurer $200,000 in cash or securities, which, with $300,000 required to be deposited under another section of the act, would constitute a fund out of which judgments se-

cured by damaged abutters could be paid. Whenever this fund had been reduced to $300,000, the state treasurer was to notify the company, and the company within ten days thereafter was to pay to the treasurer a sufficient sum to restore the fund to the full amount of $500,000. Whenever the supreme judicial court, upon application of the company, should find that there was no longer any occasion for this fund for the purposes of the act, it could order the state treasurer to pay the fund to the corporation or its assigns.

It was stipulated that whenever the company should make any excavations in or near any public highway or set any foundation, pier or post in or near a highway, the surface of the street or sidewalk should be restored as soon as possible as nearly as might be to the condition it was in before the excavation was made. Interference with water or gas mains or pipes, sewers, drains or other subterranean works was to be made only on the understanding that such works be restored immediately to a serviceable condition. The company was required to strengthen at its own expense, and in a manner to be determined by the railroad commission, any bridge over which its railway might pass.

The company was to pay taxes in the same way as if it were a street railway corporation. It was authorized to establish for its sole benefit a toll or fare which would not exceed five cents for a single passage between the termini of its routes, and this rate was not to be reduced by the legislature during the ensuing period of twenty years. Transfer checks were to be issued or transfers made on demand without additional payment, thereby entitling a passenger to a continuous ride from any station to any other station on the system. The company was authorized to lease, purchase, own and operate any lines of street or elevated railway which might be or become tributary to its lines, but no such lease could be made until the railroad commissioners had first decided that the public interests would not be injuriously affected by it.

Before the elevated railway or any portion of it could be opened to public use, an examination of it was to be made by the railroad commissioners and a certificate given by them to the effect that it appeared to be in a safe condition. The company might, however, appeal from an adverse decision of the commissioners to the supreme court. Within six months

from the date of the acceptance of this act, the company was required to apply for a route "of not less than five miles of track in the city of Boston," and within a specified time thereafter to deposit with the treasurer of the commonwealth $300,000 in cash or securities to insure the payment of damages to parties whose property had been injured, and to guarantee that at least five miles of the company's railway would be built within two years after the approval of the route. In case the company failed to build as required within that time, all of this fund not already paid out for damages was to be forfeited to the commonwealth. It was provided that the supreme judicial court or the superior court or any justice of either of such courts should have jurisdiction in equity on the petition of any interested party to compel the company to comply with the conditions of this act. If it should be found on complaint of any city in which the company was authorized to build a railway, or on the complaint of any interested party, that the company had through negligence failed to comply with the terms of the act, the court would be authorized to order the removal of the structure or pass such other decree as it deemed proper, and might even declare the company's charter forfeited, and dissolve the corporation. This section was amended by the act of 1897. The provision in regard to the forfeiture of the charter and the dissolution of the corporation was stricken out.

The original act of 1894 provided that after January 1, 1907, the company should pay a franchise tax of not less than one per cent nor more than five per cent of its gross earnings, as fixed by the board of approval created by the public statutes. This tax was to be paid into the treasury of the commonwealth and distributed to the cities and towns in proportion to the company's mileage in them. Although the company was authorized, with the consent of the mayor and aldermen, to modify its routes as specifically described in this act, it was expressly stipulated that nothing in this act should be construed to permit the company to occupy any other portion of Boston Common or of certain downtown streets than the portions expressly mentioned in the act.

By the amendatory act of 1897, certain modifications and many extensions of the company's locations were made. It

was provided by this act that before constructing its railroad on any route granted to it and before constructing any station in any public way or place, the company should file with the mayor of Boston plans showing the proposed method of construction "for his examination and approval as to architectural appearance and obstruction to light and air." If such plans were disapproved by him, the company would have authority to appeal to the board of railroad commissioners. Plans were also to be filed with the railroad commission showing the proposed method of construction, and the proposed location of the tracks, elevated structure and stations, so prepared as to show all encroachments upon streets, bridges and public or private lands. The railroad commission was to examine such plans with reference to the strength and safety of the structure and of any bridge traversed by it, with reference to the rolling stock, motive power and mode of operation and with reference to the convenience and comfort of the public. The company was forbidden to proceed with the construction of its road until it had received a certificate from the railroad commission approving the plans.

Provision was made for crossing steam railroads. If the companies interested were unable to agree as to the manner of crossing or as to the method of construction at that point, these matters were to be determined by the railroad commission on application of either party. The company was authorized to construct a portion of one of its railways over one of its routes "of such strength and character that it will be suitable for the hauling of railroad cars thereon," and the company was authorized to haul the cars of other companies on this portion of its route. The company was given the right, in the course of the construction of its railway, to remove any poles, wires or other structures found in the public streets or to interfere with underground pipes or structures. The company was authorized to construct inclines at such points as it might deem expedient for the purpose of connecting its elevated railway with surface railways or railroads.

This act continued the company's authority to charge a five-cent fare and stipulated that this should be the maximum fare "for a single continuous passage in the same general direction upon the roads owned, leased or operated" by the

company. This rate could not be reduced by the legislature until after the expiration of twenty-five years. The railroad commission might, however, upon petition of the board of aldermen or of fifty legal voters in the community affected, reduce this rate, but, unless with the consent of the company, it could not reduce the rate so far as to yield, with all other earnings and income of the company except funds deposited with the state treasurer, "a net divisible income, after paying all expenses of operation, interest, taxes, rentals, and other lawful charges and after charging off a reasonable amount for depreciation, of less than eight per cent per annum on the outstanding capital stock of said corporation actually paid in in cash." The company was also required to provide free transfers from elevated to surface and from surface to elevated cars at all stations of the elevated lines reached by surface lines, and from one elevated car or train to another. It was provided by this act that during the period of twenty-five years no taxes or excises not then in fact imposed on street railways, should be imposed in respect of the lines owned, leased or operated by the company, except such as may have been in fact imposed on the lines thereafter leased or operated by it at the date of the operating contract or lease. The company was also required to pay to the state on account of its franchise by November 1 of each year, during the entire period of twenty-five years, an annual dividend tax equal to seven-eighths of one per cent of the gross earnings if dividends paid on capital stock did not exceed six per cent; if dividends were more than six per cent, then the amount to be paid to the state was to be equal to the excess of dividends over that sum in addition to the seven-eighths of one per cent of the company's gross receipts payable anyway.

By this act, one section of the act of 1894 was amended so as to give the company specific authority to lease and operate the West End Street Railway Company's system of surface lines.

Within three months after the passage of the act of 1897 the company was to deposit with the state the sum of $300,000 in cash or approved securities. After the payment of judgments, all the remainder of this sum was to be forfeited to the commonwealth if the company should negli-

gently fail to perform any of the requirements about to be described. The company was required to petition the board of aldermen of the city of Boston for a route of not less than four or more than seven miles of double track in the city over locations granted in this act. If the route applied for should not be approved by the mayor and aldermen within sixty days after the date of the application, the company was required within thirty days after the expiration of such sixty days to apply to the railroad commission for its approval. In case of the refusal of the board of aldermen to approve any route lawfully applied for by the company, application for such approval might be made directly to the railroad commission. The company was to construct its railway over the route first applied for within three years after it was authorized to begin construction, but if construction should be delayed by litigation or unforeseen casualty, the company could apply to the supreme judicial court for relief from such forfeiture, and the court, upon notice to the attorney-general, to the city of Boston and to the West End Street Railway Company, was to hold a hearing in regard to the matter and might grant relief against the forfeiture and might fix the time within which such construction was to be completed. Within one year after the company was authorized to commence the construction of its road over the route first applied for, it was to make application "for a further route of such length that the same, with said route first applied for, shall amount to not less than seven miles of double track, exclusive of subways." The company was to have three years within which to construct this additional route, after the construction had been authorized.

The company was required to join with the cities of Boston and Cambridge in petitioning the legislature for authority to construct and maintain a bridge across the Charles River suitable for the use of the company's elevated and surface cars as well as for all the purposes of ordinary travel between the two cities. The company was to contribute toward the cost of constructing the bridge that portion of the expense rendered necessary by reason of the bridge's additional size and strength for the use of the company's elevated railroad. The balance of the cost of the bridge was to be paid, half and half, by Boston and Cambridge. Within six

months after the completion of the bridge, the company was to apply for a route beginning at any of its lines of elevated track in Boston and running thence across the new bridge to Brattle Square in Cambridge.

It was expressly stipulated in this act that "the locations of or right to maintain any elevated lines or structures of the Boston Elevated Railway Company shall not be subject to revocation" except in the manner and on the terms prescribed in the sections of the railroad law under which the commonwealth of Massachusetts reserves the right to purchase the property and franchises of any railroad corporation on certain conditions.[1] Any location, however, upon which the company had not constructed its railway within ten years from the passage of this act, would be subject to revocation by the legislature, but any location upon which the company had begun the construction of its railway within that time, would not be subject to revocation if such construction should be completed within three years thereafter. The provisions of the general laws relating to the alteration or revocation of locations of street railway companies were not to be deemed applicable to locations or routes of elevated railroads granted to this company.

By an act of 1906, the company was authorized to construct a subway or subways in the city of Cambridge, and after the acceptance of the act was required within six months to apply for an elevated railway route in the cities of Cambridge and Boston over locations granted by this or preceding acts.[2] Under this act, the company was authorized to construct its railway over the new Charles River dam then in process of construction, instead of over the Charles River bridge for which provision had been made by the act of 1894. Upon the acceptance of this act by the company, all

[1] *See*, "Massachusetts Railroad and Railway Laws, 1909," pp. 36, 37. At any time during the continuance of a railroad company's charter, after the expiration of twenty years from the opening of the railroad for public use, the commonwealth may purchase from the corporation "its railroad and all its franchise, property, rights and privileges by paying therefor such amount as will reimburse to it the amount of capital paid in, with a net profit thereon of ten per cent a year from the time of the payment thereof by the stockholders to the time of the purchase." Moreover, at any time, after one year's notice, the commonwealth may take possession of a railroad corporation's property and franchise, and pay therefor "such compensation as may be awarded by three commissioners, who shall be appointed by the supreme judicial court, who shall be sworn to appraise the same justly and fairly and who shall estimate and determine all damages sustained by it (the company) by such taking."

[2] Massachusetts Acts of 1906, Chapter 520.

the locations within the city of Cambridge granted to the company by the acts of 1894 and 1897 were to be revoked, except certain locations enumerated in the new act which were not to be revocable so long as the company kept the right to complete its Cambridge subways connecting with this route.

432. Elevated railways in Chicago.—The elevated railways of Chicago are operated by four different companies, the South Side Elevated Railroad Company, the Chicago and Oak Park Elevated Railroad Company, the Metropolitan West Side Elevated Railway Company and the Northwestern Elevated Railroad Company. As reported to the census bureau in 1907, the total route distance operated by these companies at that time was a little over fifty miles and the total main line trackage was about 120 miles of single track.[1] The Metropolitan West Side system was the most extensive, having 19.2 miles of first track and 22.72 miles of other main line tracks. The elevated railways of Chicago, with the exception of the Lake Street line and the Union Loop, are constructed for the most part through the blocks instead of along the streets as in other cities. They have been constructed under limited franchises granted from time to time by the city council beginning in 1888, the term of most of the grants being fifty years. The first line in use was the South Side line which was constructed from Congress street south to 39th street and opened for traffic June 6, 1892.[2] This line was completed to Jackson Park for the opening of the World's Fair, May 1, 1893. The Lake street line was opened March 1, 1894; the Metropolitan West Side line in May, 1895; the Union Loop October 12, 1897, and the Northwestern line May 31, 1900. The South Side and the Lake street lines were originally operated by steam, but the motive power was changed to electricity on the latter September 20, 1896, and on the former April 20, 1898. The four companies operating elevated railways in Chicago have common trackage rights on the Union Loop in the downtown business district, running through Lake street, Wabash avenue, Van Buren street and Fifth avenue. This loop is

[1] Special Reports, Street and Electric Railways, 1907, p. 394.
[2] First Annual Report of the Board of Supervising Engineers, Chicago Traction, p. 23.

about two-fifths of a mile wide east and west and three-fifths of a mile long north and south.

433. Franchises of the South Side Elevated Railroad—Chicago.—The first elevated railway franchise in Chicago was granted March 26, 1888, to the Chicago and South Side Rapid Transit Company.[1] By this grant the company was given authority to construct, maintain and operate for a period of fifty years "an elevated railroad, with two or more tracks, not exceeding three, and such curves, switches, sidings, turnouts, connections, supports, columns, girders, telegraph, telephone and signal devices, for the sole use of said company, and such other requisite appliances as the said company may deem necessary or proper," along a route described in a general way in the ordinance, commencing at Van Buren street between Dearborn street and Wabash avenue and extending southerly to 39th street. It was stipulated that the company should not use, or acquire by purchase, condemnation or otherwise a right of way more than thirty feet wide, except where a greater width was required for termini and curves, each terminus to be limited to one block in length. The company was authorized to acquire additional property, however, for stations. It was stipulated that the right of way as defined in the ordinance between Van Buren and 37th streets should be immediately adjacent to and parallel with one of the alleys. The company was required to submit the plans and specifications for its structure to the commissioner of public works for approval. This official was to determine whether they complied with the provisions of the franchise and were "equal in style, strength, finish and architecture to the most modern and improved plans in use in the cities of New York, Brooklyn and Kansas City." The railroad was to be built on an elevated structure throughout. The character of the materials to be used was prescribed as follows:

"All material used for that part of the structure above the ground shall be wrought-iron or steel, except that the connection between the posts, which forms a cluster column, may be of cast-iron, and except the rails, which shall be of steel, and except the ties or longitudinal stringers supporting the rails, which shall be of the best quality and kind of selected lumber. The safety guards shall be of iron. The

[1] Special Ordinances of Chicago, 1898, Vol. II., p. 953.

stairs and all parts of the stations, except the platforms, doors and windows and inside sheathing, and except the tread of the stairs, shall be iron. All stations, platforms and stairs shall be protected by a substantial iron railing; all of the material used in the construction of the work shall be of the best quality for the purposes to which it is to be applied, and the work shall be executed in a workmanlike manner."

The tracks were to be supported or upheld by a row or rows of iron posts or columns. Any cross-street or alley not more than fifty feet wide between the curbs, was to be crossed by a single span whenever the plan of construction called for a row of columns upon or within the curbline. Any column placed in the roadway of a street or alley was to have a transverse diameter of not more than fifteen inches at the base and for ten feet above the surface of the street. If placed within the curbline, the columns might have a diameter of twenty-six inches. The measurements just given were not to include fenders, however, which were to be fitted around the base of those columns placed in the roadway to prevent them from being struck by the hubs of the wheels of passing vehicles. Whenever rows of columns were placed in the roadway, the longitudinal distance between the columns was not to be less than thirty-five feet except on curves, and when the columns were placed on or within the curb, the distance between them was to be at least twenty-five feet. The clear headroom between the girders of the superstructure and the established grade of the streets and alleys below, was to be at least sixteen feet, and whenever the elevated structure passed over an existing surface steam railroad, the headroom above the top of the rails of the steam road was to be not less than twenty feet. The different parts of the structure were to be proportioned "to resist all the momentum of the train which can, by the application of brakes or in any other manner, be imparted to the structure." Safety guards were to be provided effectually to prevent the cars from leaving the structure in case of accident. The rate of fare for one continuous trip within the city limits as they then existed was not to exceed five cents, and policemen and firemen in uniform were to be carried free.

The company was authorized to use the streets and alleys for "all necessary or proper stairs, stairways, elevators, landing places, platforms and other constructions and appliances

for ingress, egress and the accommodation of passengers, but so as not to have impaired the usefulness" of any such street or alley. Plans for all such structures were to be submitted in advance to the commissioner of public works for his approval. It was stipulated that "the motive power shall be fully equipped with all modern devices calculated to render it practically noiseless and smokeless, and to prevent the discharge of cinders and sparks." It was also stipulated that "suitable and practicable devices shall likewise be placed beneath all stations, buildings and platforms and at all street crossings, to intercept and carry off storm water and drippings from melting snow or other sources, and similar devices shall also be applied to both motive power and rolling stock to intercept and hold all cinders, ashes, oil or anything that may drop from passing trains to the surface of the street beneath the structure." The elevated railway was to be used exclusively for the transportation of passengers and mails. The city reserved the right to regulate by ordinance the rate of speed at which the company's trains should run, the heating of cars and depots and the protection and safety of the public. The city also reserved the right to change the grade of any street over which the company's road might pass, without incurring any liability to the company for damages, and the company was required, upon receiving notice from the commissioner of public works, immediately to change its structure to conform to the changed grade so as to preserve the required headroom. The city also reserved the right to construct viaducts and approaches on any street crossed by the company's railway and to require that in any such case the company's structure should be correspondingly changed, without expense to the city. The company was required to indemnify the city "from any and all damages of every kind and character, including land and business damages, and any and all damages to property of every kind and character, and from any and all damages, judgments, decrees and costs and expenses of the same which it may suffer, or which may be recovered or obtained against said city for or by reason of the granting" of this franchise. Any failure on the part of the company to settle within sixty days after notice of any final judgment against the city on account of such damage, would result in the forfeiture of the ordinance, and the city

would be authorized to remove any or all of the company's elevated structures from the streets and alleys.

An anuual car license fee of $50 was imposed upon every car used in transporting passengers for hire, and the license, with the number of the car, was to be posted in some conspicuous place inside of the car for which it was issued. The franchise was granted upon the express condition that at least two tracks should be constructed and put in operation within two years, counting out any time during the pendency of legal proceedings by which the company had been prevented or delayed in the process of construction. It was stipulated, however, that the city law department might intervene in any suit and move the dismissal of the suit in case it was deemed to be collusive or for the purpose of delay, or for an extension of time to the company. The city reserved the right to use the elevated structure without charge for placing thereunder its police, fire alarm and telephone wires. The company was required to execute to the city a bond in the sum of $100,000 to guarantee the performance of the conditions of the ordinance. Within sixty days after the date of the acceptance of the franchise the company was to proceed to procure land for its right of way by condemnation or otherwise, and was to prosecute such acquisition with due diligence until the whole right of way had been obtained. Within sixty days after the acceptance of the ordinance, the company was to deposit with the city treasurer the sum of $100,000 as security for the faithful execution of the provisions of this grant. It was provided, however, that this money should be repaid to the company "immediately upon the completion by it of one mile of its tracks." Unless the company completed at least one mile of its track within two years, this sum of $100,000 was to be forfeited to the city. It was expressly stipulated that nothing in this ordinance "shall, in any way or manner, be construed to permit the construction or operation of said elevated railroad in any street or alley of the city of Chicago, except to cross such street or alley as herein above provided," and also that this consent "shall never in any way or manner authorize any other railroad company, or street, or horse, or dummy railroad company, to use the franchise herein above granted" to this company. The ordinance was to take effect upon its

formal acceptance, and the acceptance and bond were to be filed within sixty days after its passage.

On April 2, 1891, an amendatory ordinance was granted to this company authorizing an extension of its road as far south as Seventy-first street.[1] On this extension, the head-room required in crossing streets was only fourteen feet. The width of the right of way to be acquired was limited to a width sufficient for the operation of three parallel tracks "when laid twelve (12) feet from centers, together with an additional width to give proper clearance for passing trains from buildings erected upon property abutting upon said right of way," except that an additional width could be acquired where necessary for the convenient handling of trains at junctions and termini, and where necessary for curves, switches and sidings or turnouts. On a portion of the company's original route it was authorized in accordance with the petition of the owners of abutting property to locate its structure in an alley, but not more than two tracks were to be constructed and maintained in the alley, and no part of the elevated structure except the supporting columns and the transverse girders was to be nearer than four feet to the exterior lines of the alley. After January 1, 1892, the company was to pay to the city annually an amount equal to $4,000 per lineal mile for the portion of its road built in this alley. On the extension authorized by this amendatory ordinance, at least two tracks were to be built within three years. The clause of the original ordinance regulating the rate of fare was changed so as to make the maximum rate five cents per passenger for a continuous trip over any of the company's lines for any distance "within the present or future city limits." Moreover, under this amendment not only policemen and firemen, but also United States letter-carriers were to be given free passage.

By another amendment passed April 7, 1892, this company, in accordance with the petition of the abutting owners, was authorized to construct its elevated road along Sixty-third street for a certain distance.[2] It was stipulated that the structure erected in this street should be supported by columns, set upon or immediately within the curb lines,

[1] Special Ordinances of Chicago, *already cited*, p. 960.
[2] *Ibid.*, p. 968.

"upon which shall rest transverse girders spanning the street, upon which transverse girders the longitudinal girders for the support of the track shall be carried." Whenever practicable without the distance between them being more than fifty feet, the columns were to be located on lot lines produced, except at stations, where the columns might be as close together as twenty-five feet. All columns were to be located so as to interefere as little as practicable with the property owners' right of access to their lots.

The Chicago and South Side Rapid Transit Railroad Company was later succeeded by the South Side Elevated Railroad Company.

434. The Lake Street Elevated franchises; right of purchase reserved to the city—Chicago.—The first franchise for the Lake Street Elevated Railway Company was granted December 28, 1888. This grant authorized the construction of an elevated railway along Lake street from Canal street to the city limits as then existing.[1] The general plan of the structure was to correspond to the plan of the Meigs system of elevated railways which was described as consisting "of a compound lattice girder four feet in depth, twenty-two and one-half (22½) inches wide at the lower chord, and seventeen (17) inches wide at the top of the upper chord." The structure was to be made entirely of iron or steel excepting the longitudinal stringers on which the rails were to be placed. The structure was further described as follows:

"Of these wooden stringers or cushions there shall be four; two (2) on the upper chord upon which the rails for the driving wheels are placed and two (2) on the lower chord of the girder, upon which the rails for sustaining the supporting and weight-bearing wheels revolve. The posts are of iron, twelve and three-quarters (12¾) inches by eighteen (18) inches and twenty-six (26) feet long. Each post shall be set in the earth down six (6) feet below the surface of the street, on a firm foundation, and shall be solidly and firmly encased in a concrete filling, rammed solidly, so as to resist all lateral movements of any kind. The truck of each engine or motor and car shall be constructed with a heavy iron frame, and placed astride the upper chord and girder, extending down on each side four feet; the top of the iron truck frame being one and one-half (1½) inches above the top of the upper chord of the longitudinal girder, and all to be so constructed as to make derailment impossible. The cross girders shall be plate girders of iron or steel, and in cross sections not less than three (3) feet, subject, however, to the approval of the commissioner of public works."

[1] Special Ordinances of Chicago, *already cited*, p. 866.

Every cross street not more than sixty feet in width between curbs was to be spanned by a single span. The longitudinal distance between columns, except on curves, was to be not less than thirty-three feet. The distance between columns at curves was to be determined by the commissioner of public works. During the construction of the road, the company was to pay the city $3,000 a year for the service of engineers to supervise construction work. The rate of fare "within the present and future city limits" was not to exceed five cents, and after the expiration of two years from the final completion of the road the company was to sell commutation tickets at the rate of twenty-five for one dollar.

The company was authorized to construct "necessary platforms and landing places from the line of their elevated railway system across the roadway and sidewalk to the passenger stations," the latter to be located within the building line of the street on property purchased or controlled by the company. Landing-places located in the streets alongside the company's tracks were not to be more than one hundred feet long and six feet wide. The company was to locate at least four stations in each mile of its route except where parks intervened. The platforms and landing-places were to leave a clear headroom of eighteen feet above the surface of the sidewalk, and no stairs, elevator, landing-place or other construction was to be located within the sidewalk space, or in any portion of Lake street. No wood or bituminous coal was to be used in any locomotive employed by the company in operating its trains. In case the company operated by electricity, the wires were not to be strung overhead, but were to be confined in conduits located along the girders not less than fourteen feet above the established grade of the sidewalks, streets and alleys. The franchise was granted subject to all general ordinances then in force or that might thereafter be passed relating to elevated railways, and the city expressly reserved the right of regulating the rate of speed and the frequency at which the company's trains should run. It also reserved the right to regulate the heating of cars and depots and to impose such regulations as might be deemed necessary for the protection, convenience and safety of the public. The franchise was granted on the

express condition that the company should do no permanent injury "to the pavement, gutters, sidewalks, water pipes, sewer or gas pipes, telegraph or electric wires, cables or pipes, or sidewalk space occupied by adjacent owners." All such fixtures or improvements disturbed by the company were to be restored at its expense. In case of any excavation in a street or alley paved with wooden blocks, the foundation boards or planks were to be removed without being cut, unless such cutting was specially permitted by the commissioner of public works. It was stipulated that the entire elevated system authorized by the ordinance should be completed and in running order within two years. The company was required to execute an indemnity bond in the amount of $500,000 to protect the city against damage claims.

This franchise was granted for a period of twenty-five years, with the stipulation that at the expiration of such period the parties operating the railway should be entitled to enjoy all the privileges of the grant "until the common council shall elect, by order for that purpose, to purchase said tracks of said railways, cars, carriages, station houses, station grounds, depot grounds, furniture and implements of every kind and description used in the construction or operation of said railways, or any of the appurtenances in or about the same, exclusive of the value of the right of way or license herein granted." In case of purchase the city was to give at least six months' notice, and the purchase price was to be ascertained by three commissioners, disinterested freeholders of Cook county, one to be appointed by the council, one by the company and the third by the two so chosen. It was expressly stipulated that this franchise should "never in any way or manner authorize any other railroad company or street, or horse, or dummy railroad company to use the franchise hereinabove granted." In matters not covered by the provisions I have just described, the ordinance was similar, for the most part, to the original South Side franchise of 1888.

Although the company commenced the construction of the Lake street line under the franchise just described, the line was not completed under this grant. On November 24, 1890, the council granted the company two new ordinances. One covered that portion of the Lake street line extending from

Canal street to Crawford or South Fortieth avenue.[1] The other ordinance covered one extension from Crawford avenue to the city limits, and a second extension at the downtown end of the line through Lake street across the south branch of the Chicago river with a loop through Market street and adjacent blocks.[2] The portion of the company's line already constructed was to be deemed to have been constructed under the first of the new ordinances, both of which were granted for a period of forty years with the right reserved to the city to purchase the railways and their equipment at the end of twenty-five years. In case of purchase, the price was to be ascertained and determined by three competent appraisers who were to have "free access to all the books, papers and other data bearing upon the subject." One of the appraisers was to be appointed by the mayor, one by the company and the third by the two so chosen, or in case the two could not agree upon a third, he was to be appointed by any one of the chancellors of the Cook county circuit court. No franchise value was to be included in the purchase price. The appraisers were to report within six months after their appointment, and the city was to have an option to take over the road at the appraised value at any time within six months thereafter.

The new ordinances differed from the original ordinance of 1888 in many details. The commissioner of public works was required "to examine the materials used and the work done upon said elevated railroad in all details," and if he found that the ordinance was not being complied with, authority was reserved to him to stop the work until the necessary changes were made. The company was to pay all the expense incurred by him for a superintendent or engineer to inspect the work for the city. It was expressly provided that the structure should be so proportioned as "to carry with absolute safety a dynamic load equal to one thousand (1000) pounds per lineal foot of each track, with a factor of safety of not less than five, exclusive of the static weight of the structure itself." The provision of the company's original ordinance requiring the sale of commutation tickets was omitted, and a flat five-cent rate of fare was established for

[1] Special Ordinances of Chicago, *already cited*, p. 875.
[2] *Ibid.*, p. 806.

steam railroads shall be absolutely excluded from said elevated railroad, its tracks and right of way, and that it shall be used for moving its general passenger trains only and for accommodating and handling passenger traffic and the mails exclusively, to which end the said company shall cause its trains to be regularly and systematically moved at such intervals as shall be necessary to acommodate the public, and the number of all such trains and the frequency with which they are moved shall be increased as rapidly as the demands of the public shall render necessary and the increase of traffic warrant."

It is noteworthy that in the description of the structure, this ordinance provided that the supports might be of masonry when not erected in any street or public place. All cross streets not more than seventy feet wide between curbs were to be spanned by a single span. The branches of the company's road authorized by this ordinance, unlike the main line, were to run through the blocks on private rights of way. In addition to fixing the maximum rate of fare at five cents, the council expressly reserved the right "to regulate, control and fix the rates of fare that shall be charged upon any extension of the elevated system of said company when such extension is constructed within the present or future city limits by authority of any ordinance hereafter passed." This ordinance also provided that the company's "supporting columns, cross-girders, longitudinal girders, platform connections and hand-railing shall be thoroughly and neatly painted, in light colored tints, and this general condition and sightly appearance shall be maintained at all times." The motive power was to be "fully equipped with all modern devices best calculated to prevent noise and the discharge of ashes, sparks, cinders, dust, steam or smoke into the surrounding atmosphere."

It was stipulated that whenever the grade of any street over which the company's structure passed should be raised more than eighteen inches, the company should immediately change its structure so as to conform to the new grade, leaving the required headroom of fourteen feet. The city stipulated that nothing in this ordinance should prevent it from granting to any other company the right to cross this company's lines, leaving a headroom of at least sixteen feet

between the structures of the two companies. It was also provided that "the space and the surface of the ground under said railroad beneath girders and between columns, so far as the same is not occupied by said railroad company, shall by said company be kept at all times free from all obstructions and in a clean and wholesome condition, to the approval and satisfaction of the department of health or health officers of said city; and the same may be, at the option of the city of Chicago, paved by the city of Chicago, for the purpose of public travel, and so used, provided, that such use shall not interfere with the use thereof by said company for the purposes of said railroad."

By an ordinance passed October 1, 1894, this company was granted an extension through Lake street from Market street to Wabash avenue.[1] This extension later formed one of the four sides of the Union Loop. It was stipulated that the columns should be placed, when practicable, at the outside of the street car tracks already in the street, and that the longitudinal distance between the columns should not be less than forty feet except at curbs and street intersections. Before receiving a permit to commence work, the company was to deposit with the city treasurer "a sum sufficient to cover the cost of restoring all streets and sidewalks and the contents of the space beneath the same to their normal condition, according to an estimate of such cost to be made by the commissioner of public works." In describing the materials to be used in the construction of stations, the ordinance permitted "other incombustible materials" as an alternative to iron or masonry. Stations were to be constructed at three locations named in the ordinance. The platforms at the stations were not to be more than 180 feet long and were not to be enclosed except so far as necessary for the building of a ticket station occupying not to exceed 120 square feet. If these platforms were covered, they were to be "roofed with glass or such other material that will not intercept the light any more than is necessary to fully protect from the heat and storms."

435. The Metropolitan West Side and the Northwestern Elevated franchises — Chicago. — The construction of the Metropolitan West Side Elevated Railroad was authorized by

[1] Special Ordinances of Chicago, *already cited*, p. 912.

steam railroads shall be absolutely excluded from said elevated railroad, its tracks and right of way, and that it shall be used for moving its general passenger trains only and for accommodating and handling passenger traffic and the mails exclusively, to which end the said company shall cause its trains to be regularly and systematically moved at such intervals as shall be necessary to acommodate the public, and the number of all such trains and the frequency with which they are moved shall be increased as rapidly as the demands of the public shall render necessary and the increase of traffic warrant."

It is noteworthy that in the description of the structure, this ordinance provided that the supports might be of masonry when not erected in any street or public place. All cross streets not more than seventy feet wide between curbs were to be spanned by a single span. The branches of the company's road authorized by this ordinance, unlike the main line, were to run through the blocks on private rights of way. In addition to fixing the maximum rate of fare at five cents, the council expressly reserved the right "to regulate, control and fix the rates of fare that shall be charged upon any extension of the elevated system of said company when such extension is constructed within the present or future city limits by authority of any ordinance hereafter passed." This ordinance also provided that the company's "supporting columns, cross-girders, longitudinal girders, platform connections and hand-railing shall be thoroughly and neatly painted, in light colored tints, and this general condition and sightly appearance shall be maintained at all times." The motive power was to be "fully equipped with all modern devices best calculated to prevent noise and the discharge of ashes, sparks, cinders, dust, steam or smoke into the surrounding atmosphere."

It was stipulated that whenever the grade of any street over which the company's structure passed should be raised more than eighteen inches, the company should immediately change its structure so as to conform to the new grade, leaving the required headroom of fourteen feet. The city stipulated that nothing in this ordinance should prevent it from granting to any other company the right to cross this company's lines, leaving a headroom of at least sixteen feet

between the structures of the two companies. It was also provided that "the space and the surface of the ground under said railroad beneath girders and between columns, so far as the same is not occupied by said railroad company, shall by said company be kept at all times free from all obstructions and in a clean and wholesome condition, to the approval and satisfaction of the department of health or health officers of said city; and the same may be, at the option of the city of Chicago, paved by the city of Chicago, for the purpose of public travel, and so used, provided, that such use shall not interfere with the use thereof by said company for the purposes of said railroad."

By an ordinance passed October 1, 1894, this company was granted an extension through Lake street from Market street to Wabash avenue.[1] This extension later formed one of the four sides of the Union Loop. It was stipulated that the columns should be placed, when practicable, at the outside of the street car tracks already in the street, and that the longitudinal distance between the columns should not be less than forty feet except at curbs and street intersections. Before receiving a permit to commence work, the company was to deposit with the city treasurer "a sum sufficient to cover the cost of restoring all streets and sidewalks and the contents of the space beneath the same to their normal condition, according to an estimate of such cost to be made by the commissioner of public works." In describing the materials to be used in the construction of stations, the ordinance permitted "other incombustible materials" as an alternative to iron or masonry. Stations were to be constructed at three locations named in the ordinance. The platforms at the stations were not to be more than 180 feet long and were not to be enclosed except so far as necessary for the building of a ticket station occupying not to exceed 120 square feet. If these platforms were covered, they were to be "roofed with glass or such other material that will not intercept the light any more than is necessary to fully protect from the heat and storms."

435. The Metropolitan West Side and the Northwestern Elevated franchises — Chicago. — The construction of the Metropolitan West Side Elevated Railroad was authorized by

[1] Special Ordinances of Chicago, *already cited*, p. 912.

an ordinance passed April 7, 1892.[1] The main line of this road was to start at a point near the east line of Fifth avenue between Jackson and Congress streets and was to extend to the western city limits. The main line and three branches authorized by the ordinance were to be constructed on private rights of way except at street crossings. A limit of fifty feet was placed, however, on the width of the right of way which the company might acquire or use, except at curves and in the vicinity of terminal stations and platforms. The rate of fare to be charged on the company's lines was limited to five cents, and the council reserved the right to regulate rates to be charged on any future extension. The company was required to have at least two tracks constructed for a distance of eight miles within two years from the acceptance of the ordinance, and the remainder of the railroad and branches constructed within one year thereafter, on penalty of losing its franchise for the portions not constructed within the time limits specified. The usual provision was made, however, for excluding time lost through legal proceedings, with the stipulation that the city should have the right to intervene in any suit brought by any person seeking to enjoin, restrain or interfere with the prosecution of the work. In most respects, this ordinance followed the same lines as the other elevated railroad franchises granted by the city of Chicago, which I have already described.

The original franchise of the Northwestern Elevated Railroad Company was granted January 8, 1894, for a period of fifty years.[2] This ordinance provided for "two or more tracks, not exceeding four, as the company may, from time to time, determine to be necessary." The company was authorized to cross the Chicago river and the south branch with its main line and one of its branch lines by means of new bridges to be constructed by it, or by means of tunnels to be constructed on plans to be approved by the commissioner of public works. However, the company was given the option to cross the river by means of any one of the existing bridges excepting that at Lake street, and for that purpose was authorized to rebuild and enlarge any of such bridges upon a plan to be approved by the mayor and the commis-

[1] Special Ordinances of Chicago, *already cited*, p. 922.
[2] *Ibid.*, p. 933.

sioner of public works. If an existing bridge was to be used, it was to be so reconstructed as not to interfere in any way with traffic, and all the expense of operating, maintaining or repairing such bridge was to be borne by the company during the life of the ordinance. The main line and the four branches authorized by the ordinance were to be constructed over private rights of way. The company was authorized to operate its railway "with locomotive or other engines or motors, and railway cars, subject to all ordinances of said city of Chicago now in force, or that may hereafter be passed and be in operation." The five-cent rate was established as the maximum to be charged by this company on its entire system within the city limits, including any extensions or connections operated or controlled by it or its lessees or successors. It was stipulated, however, that "police, firemen and mail-carriers in uniform may be permitted to ride free of charge."

In this grant it was stipulated that the portion of the company's line from its southern terminus south of the river to Wilson avenue in the town of Lake View, should be constructed and put in operation within three years from the acceptance of the ordinance, under penalty of the absolute forfeiture by the company of the rights and privileges granted, in case of failure so to construct. This line was to be extended north to the city limits within ten years from the acceptance of the ordinance, under penalty of forfeiture by the company of its right to construct the portion of its road not constructed at the end of that period. In case of failure to complete this line to the city limits, the company was also to pay to the city as liquidated damages the sum of $25,000 for every such mile of uncompleted road. All other portions of the main line and branches were to be built within five years, but if this condition should not be fulfilled, the company would not lose its entire franchise, but only that portion of it covering the routes that remained unconstructed. After the expiration of ten years from the commencement of operation of any part of its railway, the company was to pay into the city treasury annually for ten years, one per cent of its gross receipts, during the following ten years, two per cent, and during the remainder of the fifty years for which the franchise was granted, three per cent.

By an amendatory ordinance passed June 24, 1895, the the company was granted an extension of its route, including a location in Fifth avenue between Lake street and Van Buren street, which later formed one side of the Union Loop.[1] By the terms of this ordinance the route in Fifth avenue south of Lake street was to be subject to the joint use of all the elevated railroad companies then having franchises in Chicago, and was to be leased to the Union Elevated Railroad Company, and the railroad was to be constructed and maintained by that company. The ordinance stipulated that the structure authorized by it to be constructed in Wells street and Fifth avenue was to be supported by columns located "as near the outside rails of the now existing surface car tracks in said street as is consistent with the safety of the operation of the latter, and such columns and supports shall nowhere be more than three and one-half feet outside of the outside rails of said now existing surface car tracks, except on street intersections, where they shall be set in the curb-line except as hereinafter stated." The structure on these streets was to be made "as light and presentable as is compatible with the traffic thereon." It was stipulated that the "space between the cross ties of the tracks, and also the space between the tracks themselves, shall not be floored, or otherwise closed, but shall be left open for the transmission of light, except at stations so far as necessary to provide for passenger platforms." The motive power used on the company's structures in the central business section was to be electricity "or some other motive power equally clean and noiseless," but the Chicago and South Side Rapid Transit Railroad Company was to have the right, for a period of three years, to use steam as a motive power for operating its cars over the portion of the railroad in Fifth avenue. The company was authorized to connect its power houses with its elevated railway structures by means of underground conduits or overhead poles and wires.

436. The Union Loop elevated franchise—Chicago.—The franchises for the Union Loop, except those portions of it in Fifth avenue and Lake street, were originally granted to the Union Elevated Railroad Company and the Union Con-

[1] Special Ordinances of Chicago, *already cited*, p. 944.

solidated Elevated Railway Company in 1895 and 1896.[1] The franchise of the Union Elevated Railroad Company, passed October 14, 1895, covered the portion of the loop in Wabash avenue. Two tracks only were to be built along this route, and the road was to be subject to the joint use of all the elevated railway companies "upon such terms and conditions as have been agreed upon under any and all contracts" then existing between the several companies or such contracts as might thereafter be entered into between them for the use and operation of the railroad. The columns of the elevated structure were to be placed as near the outside rails of the street car tracks as was consistent with safety, but were not to be at any place less than four feet outside of such tracks except as otherwise provided in the ordinance. The rate of fare for a continuous ride on the loop and any one of the lines of railroad using the loop, was to be five cents "and no more." The company was required to "light with incandescent electric lights all street and alley crossings or intersections" along its route. Each intersection was to be lighted by ten 32-candle power lamps, and each alley crossing by five such lamps, all of which were to be placed, maintained and operated subject to the approval of the commissioner of public works.

The original ordinance of the Union Consolidated Elevated Railway Company, passed June 29, 1896, covered the portion of the loop lying in Van Buren street. This track also was to be subject to joint use by the several elevated railroad companies. This ordinance contained a provision that the company should run its trains through the night at regular intervals of not more than thirty minutes. As in the case of the ordinance of the Union Elevated Railroad Company, this franchise limited the rate of fare to five cents for persons carried over the line of any one railroad using the tracks of this company and going around the loop. By this ordinance "every and all acts or deeds of transfer of rights, privileges or franchises, and all contracts, mortgages, deeds of trust, leases, stipulations, licenses and undertakings made, entered into or given between" the several elevated railroad companies or any two or more of them, or between any of them and any other person or corporation, concerning

[1] Special Ordinances of Chicago, *already cited*, pp. 964, 972.

their several railways or the construction, or the use and operation of such railways, were "approved, ratified and confirmed."

As a consideration of securing the mayor's signature to the ordinance just described, an agreement was entered into July 6, 1896, between the Union Elevated Railroad Company, the Union Consolidated Elevated Railway Company and the City of Chicago, by which the companies agreed on behalf of themselves, their successors and assigns and "whoever shall control and operate the said loop line, or be in receipt of or be entitled to receive the tolls, income, rents, issues and profits thereof," to pay into the city treasury certain percentages of the gross earnings of the loop line after deducting from such gross earnings at the rate of $250,000 a year as an interest charge.[1] It was stipulated that "said tolls, income, rents, issues and profits, within the meaning of this agreement, shall not include the expenses for maintenance and operation of said loop line (including taxes) which are all understood to be exclusively payable by certain other corporations proposing to use said loop line, although so payable through said railroad companies or one of them." The portion of the gross earnings to be paid the city, after the deduction of the $250,000 annual charge for interest, began at five per cent for the five-year period ending December 31, 1901. During the next five-year period, the payments were to amount to ten per cent per annum of such gross receipts; during the succeeding ten-year period, fifteen per cent was to be paid; during the fifteen-year period next following, twenty per cent was to be paid, and during the remaining term of the ordinance, approximately fifteen years, twenty-five per cent of gross receipts was to be paid into the city treasury. It was stipulated that if "the rates of tolls or rentals payable by or chargeable to any person or corporation for the use of said loop line" should at any time be reduced below the rates prescribed in certain contracts already entered into between the Union Elevated Railroad Company and the operating companies, the gross receipts for the purposes of this agreement should continue to be computed "precisely as if no such reduction had been made."

In 1907, the first year for which the rate of payment to

[1] Special Ordinances of Chicago, *already cited*, p. 983.

the city was fifteen per cent of the gross earnings of the loop line, the amount so paid was $71,028.[1] The loop line is now controlled by the Northwestern Elevated Railroad Company through stock ownership. Under the leases with the various operating companies, the Union Elevated Railroad Company receives one-half of one cent for every paying passenger carried on the lines of the several operating companies, without regard to whether he rides on the loop or not. The operating companies are required, in addition, to pay the entire cost of "maintenance, renewals, repairs and operation, including the taxes, assessments, insurance, and ground rent" of the power house used to furnish electric current for the loop. The companies also have to pay the entire cost of "maintenance, insurance, renewals, repairs and operation of the tracks, ties, switches, signals and signal towers," and the cost of operating the stations. The owner of the loop has to bear the expense of taxes, assessments, and maintenance, repairs and renewals of the structure itself and the stations.

437. Recent elevated railroad extensions in Chicago.—On December 19, 1898, the board of trustees of the town of Cicero granted to the Cicero and Harlem Railway Company a franchise to extend the Lake Street Elevated line along South Boulevard to the western limits of the town at Seventy-second avenue. The railway provided for by this ordinance was to be operated as a portion of the Lake Street Elevated line, but the grantee was authorized to construct its road for the greater part of the distance at grade. The cars on this line were not to be used for any other purpose than "for the transportation of passengers and their ordinary baggage, and such parcels, packages, express matter and mail as are ordinarily transported on passenger trains," except that the company was authorized to transport over its tracks any materials to be used in the construction, maintenance and operation of the railroad and also "to remove waste" between nine o'clock at night and six o'clock in the morning. It was stipulated that through cars should be operated from this line over the Lake Street Elevated Railroad to and around the Union Loop. A ten minute schedule for through cars between Austin and Wisconsin avenues was required for every day except Sunday, between 6:15 and 8:15 in the

[1] *Electric Railway Review*, March 21, 1908, p. 348.

morning and between 4:30 and 6:30 in the afternoon. At other times between five o'clock in the morning and midnight, trains were to be run each way as often as every twenty minutes, and from midnight to 1:30 A. M. every forty-five minutes. During the remainder of the night, a headway of an hour and a half was to be maintained. A five-cent fare was to be given over the line covered by this grant, and tickets at the rate of twenty for a dollar were to be sold, good for a continuous ride either way between stations east of Austin avenue. At stations west of Austin avenue tickets were to be sold at the rate of twelve for one dollar, good for continuous rides either way between any station west of Austin avenue and any station on the Lake Street Elevated Railroad or the Union Loop. This provision was not to apply to cars chartered for special purposes.

It should be noted that all of the early elevated railroad franchises granted by the city council of Chicago date from the period when the council was regarded as an extremely corrupt body. It is of particular interest, therefore, to note any changes of policy which may be apparent in the granting of franchises for elevated railway extensions in more recent years. By an ordinance passed January 16, 1905, known as the "Ravenswood Extension Ordinance," the Northwestern Elevated Railroad Company acquired a franchise for an extension, to be exercised during the period ending January 8, 1944, that being the date upon which the company's original franchise for its main line would expire. It was stipulated that the company should furnish and maintain adequate lights, not less than one arc light of 400 watts, for public lighting purposes at each street crossed by the elevated railroad, the lighting to be done upon order of the city electrician, and the company to have the option of installing the lights or of having it done by the city. If the installation and maintenance were done by the city, the company would be required to pay the city not only the cost of installation, but also a reasonable cost for the maintenance of the lights and the furnishing of electric current. The company was expressly authorized to extend its railroad "over and onto adjacent property which it may acquire by purchase, condemnation or otherwise, for the purpose of establishing yards for the storage of cars only at such points

as may be determined upon by the Commissioner of Public Works." In the company's construction work, reasonable provision was to be made "for the deadening of noise caused by the operation of cars." It was stipulated that the rate of fare was not to be more than five cents for a continuous trip over any of the company's lines, with universal transfers over the company's entire system. Children under seven years of age accompanied by a parent or guardian were to ride free. It was stipulated that if at any time the city should acquire the structure built under the terms of this ordinance, whether by purchase or condemnation, it should pay nothing "for this franchise or the earning power accruing therefrom."

By another ordinance passed July 17, 1908, the Northwestern Elevated Railroad Company was authorized to construct a stub terminal on North Water street. One of the interesting provisions of this ordinance was that the company should "transport a funeral train or trains from its said proposed terminal at North Clark and North Water streets, and from its East Chicago avenue station, between the hours of 12 o'clock noon and 1 o'clock P. M., upon each and every day" during the term of the grant. It was also made an express condition of the passage of this ordinance that the company should "give and receive transfers over and from all the other elevated railroads in the City of Chicago," and "through-route its cars over the lines of all such other elevated railroads operated in the City of Chicago, whenever, and at such time or times, as the City of Chicago, shall require such other elevated railroad company or companies" to accept the transfers of this company over their lines.

An ordinance granting an extension to the Chicago and Oak Park Elevated Railroad Company reported to the city council on March 21, 1910, by the committee on local transportation, contains other features of special interest.[1] The period of the franchise was to be limited to thirty years. The company was expressly required to provide "public comfort facilities in all of its stations hereby authorized to be constructed, for the accommodation of passengers." It was also stipulated that the railway should be "fully equipped with

[1] Journal of Proceedings of the City Council, March 21, 1910, p. 3491.

all modern devices best calculated to prevent noise occasioned by the operation of motors and trains," and to prevent "the discharges of any deleterious substances into the surrounding atmosphere." The company was to provide "conveniently located and adequate shelter for passengers" at points of transfer to other branches of this company's road or to other elevated railroads. It was expressly provided that if the company should construct its road "within two hundred twenty-five (225) feet of any existing school, church or hospital, then and in such case it shall construct its line of road upon a concrete foundation and its roadbed shall be ballasted and cushioned in a manner best calculated to deaden noise, for a distance equal to the width or length of the school, church, or hospital paralleled by said road, and in addition thereto for a distance of two hundred (200) feet on either side thereof."

The city reserved the right to purchase at any time after fifteen years from the passage of the ordinance, the elevated structure and the company's property and equipment pertaining to the elevated railway to be constructed under this ordinance. The purchase price was to be determined by three appraisers, who were to have "free access to all of the books, papers and other data bearing upon the subject." Nothing was to be included in the appraised valuation for any rights, privileges or franchises granted by the city of Chicago or other municipalities. One of the appraisers was to be appointed by the mayor, one by the company and the third by the two so selected, or if they could not agree, by any one of the chancellors of the circuit court of Cook county. It was stipulated, however, that the "appraised value shall not be less than the reasonable cost of said elevated railway structure and the property and equipments of said company pertaining to the same," less the amount of depreciation sustained by such structure and property prior to the appraisal. The city also reserved the right to designate another person, firm or corporation as its licensee, with the right to take over the company's property by paying the price at which the city could take it over, plus a bonus of ten per cent. It was expressly stipulated that the enumeration of special requirements and specific regulations contained in the ordinance should not be taken or held to imply the relin-

quishment by the city of its power to make other requirements or regulations. This proposed ordinance granting to the company an extension of its line, was not to take effect unless the company accepted the terms of another ordinance requiring it to elevate its tracks in South Boulevard as far west as Austin avenue where the Cicero and Harlem Railway Company had been authorized by the town authorities to build at grade.

An interesting development in connection with the Union Loop constructed in the downtown streets is the fact that at some points the columns of the elevatcd structure, which under the ordinances were to be placed on either side of the existing street railway tracks, were placed so close to the tracks as to prevent the through-routing of the large, modern street cars put upon the surface lines of Chicago under the settlement ordinances of 1907. This interference with the plan of street car operation is in fact so serious that the relocation of the columns of the elevated structure wherever necessary to let the street cars pass is now in contemplation.

The number of passengers carried on the elevated roads of Chicago during the year 1907, was about 147,000,000, which is only a little in excess of the number carried annually by the elevated railroads of Brooklyn and their surface extensions.

CHAPTER XXXIII.

PASSENGER SUBWAY AND FREIGHT TUNNEL FRANCHISES.

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438. Subways as a factor in local passenger transportation.—The city subway or underground street, constructed for the special use of urban railway traffic, follows as the logical next step after the construction of elevated railways. When the one-story street has become insufficient to accommodate the traffic that surges through it, it is natural, as a first means of relief, to build an elevated structure for the special use of rapid transit passenger trains. As we have already noted in the discussion of elevated railroad franchises, Chicago is an exception in that its elevated railroads are for the most part constructed over private rights of way and not as second stories of the streets. In crowded traffic centers such as have already developed in New York, Boston, Philadelphia and Chicago, the two-story street has been outgrown. The next step is to build a third story underneath, or in other words, to make a basement for the street. The owner-

ship of the street itself, since the days of turnpikes and toll roads passed, has been almost universally in the state or the city. In some parts of the country the technical ownership of the land occupied by the street, subject to a public easement for highway purposes, is vested in the owners of abutting property. In New York, indeed, the interest of the abutters is more than technical, for the courts have held that the public easement is not sufficient to include the use of the street for railway purposes, either on, above or below the surface. The abutting owners, therefore, are entitled to damages in New York on account of the construction and operation of railways in the streets in which they own the fee. Elevated railroads, as they have been developed thus far in this country, have been constructed and owned by private companies under special franchises. In New York, Brooklyn, Boston and Philadelphia, these franchises are perpetual, while in Chicago, where the structures are for the most part on private property, and where, accordingly, perpetual franchises would be more excusable, the grants have been for a period of fifty years.

When traffic in the heart of a great city becomes so dense that the construction of railroad subways is necessary, a problem of the greatest importance arises. The enormous cost of construction is only equalled by the strategic importance of the subways, when once built, as controlling factors in the general transit system of the city. Horse railways in the early days were extremely profitable in the great centers of population, but the horse car lines still being operated on Manhattan Island hardly pay operating expenses. In like manner the surface trolley lines, when they became fully established, gave promise of economical operation in the handling of immense amounts of urban passenger traffic. With the increasing length of haul, however, the growing congestion of street traffic and the multiplying expenses of operation, the trolley lines are becoming utterly inadequate to take care of the traffic in the cities. The elevated railroads have come to be the most profitable portions of the urban transit systems. They are subject, however, to a handicap in this respect, namely: elevated structures in the streets, under conditions that obtain in most American cities, are so much of a nuisance that even with perpetual fran-

chises their permanence is not entirely assured. Extensions are granted grudgingly, and while the elevated railroads are now very profitable, there is no telling when the people will insist upon their removal as obstructions to the streets. It is certain that only the imperative necessity of cheap rapid transit has been responsible for their admission to the streets at all, and if at any time in the future that necessity could be met by other means, there is little doubt that the elevated roads in the narrow streets where they are now for the most part constructed would have to go. Subways, therefore, which, once constructed, appear to be the most permanent of all municipal works, will undoubtedly be the controlling factor in the transit system of any city in which they are built. The initial difficulty in the way of building a subway for a rapid transit railroad underneath streets that are already crowded with a multitude of sub-surface structures, is the enormous construction cost. It is estimated that a four-track subway under the streets on the Island of Manhattan, involves an original cost of about $6,000,000 a mile for construction alone, without equipment.[1] It follows, however, other things being equal, that the more expensive an improvement of this kind is, the more useful and necessary it will be after it is once constructed. Perhaps it is fortunate for the future welfare of the great cities of America that when the need for subways once became imperative in New York and Boston, private capital was not inclined to undertake the experiment and run the risk involved in what was then a practically unknown method of construction for city transit lines. Here was an undertaking that seemed too great and too hazardous for private initiative. Accordingly, in both New York and Boston, the subways have been built out of funds furnished by the city, and the ownership of the subways vests in the city.

As a practical problem in the development of urban transit facilities, the construction of subways involves enormous difficulties. The original cost is so great that it is absolutely necessary to plan subways only for the most strategic and

[1] The subway constructed under Contract No. 1 and Contract No. 2 on June 30, 1909, comprised 25.63 miles of route and about 73 miles of main line track. The subway is in part a four-track tunnel, but includes also some two-track tunnel and considerable two-track or three-track elevated structure. The cost of construction was about $66,500,000, and the cost of equipment about $27,500,000 more.

congested routes and to plan them so as to secure a maximum capacity for a given expense. A subway unused, or not used to its full capacity, is a luxury too expensive for any city to afford. The short loop line connecting the Williamsburgh, Manhattan and Brooklyn bridges in New York was constructed by the city without any arrangements being made in advance for its use. The result is that pending the completion of other lines, which may involve a delay of several years, this loop is "eating its head off" at the rate of $1000 a day in interest charges. Another serious difficulty to be overcome in the construction and operation of subways is the problem of ventilation. So far as the comfort of passengers is concerned, riding in the subways seems to be preferable during the winter months and riding on the elevated roads during the summer months. It is little short of marvellous that engineering skill can provide means of ventilating a subway so as to make the atmosphere even tolerable for the immense throngs of people who use the underground tube during the rush hours. It has been suggested, however, that in addition to the discomforts arising from imperfect ventilation and overheating, there may be serious danger to health in the fact that the great number of rapidly moving trains grind down the rails and fill the atmosphere with a fine, impalpable steel dust which passengers have to breathe. How serious this factor may be has not yet been fully determined. It is clear, however, to anyone who has had experience in subway travel, that spending from one to two hours daily in the underground tubes, is not in itself conducive to the health and comfort of the people. The disadvantages of subway travel are of course multiplied with the congestion of traffic. The enormous cost of the subway makes it necessary to use it to its maximum capacity, while on the other hand, the exceptionally bad effect of overcrowding in subway traffic makes it imperative that this maximum use should be by means of frequent train service rather than by means of crowded cars. Modern necessity frequently compels us to close our eyes to matters of sentiment and of æsthetic appreciation. Conditions coerce the people of great cities to travel in subways. It cannot be denied, however, that underground transportation between the house and the office tends to diminish a citizen's knowledge of his city and

his interest in it. He has no chance to observe, in his daily travel to and fro, the general condition of the city, the work that is being done by its various departments and the improvements that are being made by private enterprise. Travelling through a congested tenement district on an elevated railroad may have the effect of arousing intelligent citizens to the necessity of civic action of the highest importance. Travelling through the same section by a subway leaves the citizens in blissful or complaining ignorance of the conditions that need to be remedied. It is particularly distressing to think of the natural effect upon the citizens of New York resulting from being shot through tubes under the East river and the North river as compared with the effect of making daily trips by ferryboat above water with the harbor, the shipping and the skyline in constant view. A city where subway and tunnel traffic is predominant gives an uncomfortable suggestion of a human ant-hill. These various considerations make it imperative that subways and tunnels should be as numerous as may be necessary to comfortably accommodate traffic, but as short as possible, leaving feeders and connecting lines to be constructed as surface or elevated roads.

The subway may be built for the use of special rapid transit trains exclusively, as in New York, or for the joint use of surface cars and elevated trains, as is true in part in Boston and Philadelphia. As long as the general system of transit lines is operated by private companies, it is logical that the subways should be operated by private companies. Indeed, the unification of operation of surface lines, elevated roads and subways in Boston and Philadelphia shows the subway in its logical connection with the rest of the transportation system. The importance of the subway as the strategic link is so great, however, that any city desiring to maintain control over the use of its streets and of the development of that department of the public service known as urban transportation, should not only build and own its subways, but should lease them or give operating rights in them either for short periods or subject to termination at any time. Subways should be self-sustaining and to this end the city should require the companies using them to pay rentals sufficient to take care of the interest on the bonds is-

sued by the city for subway purposes. It is notorious that the tendency of public utility corporations is toward the constant increase of capitalization with no provision for ever paying off outstandng bonds except by the issue of new ones. Cities, on the other hand, are usually required either to set aside a sinking fund sufficient to retire their bonds when due, or else to retire them serially out of the proceeds of taxation. This wise policy should control in relation to subways as well as to other public improvements. It is therefore necessary, either that the subway rentals should be sufficient to provide for a sinking fund in addition to interest charges, or that such a sinking fund should be supported out of taxes. Under most conditions, good public policy would seem to require that a subway should be made to pay for itself.

While there is a very marked physical distinction between subways and elevated roads, it is a fact that in practice the outlying portions of a comprehensive subway system will naturally be on viaducts or elevated structures. In Brooklyn, many of the "elevated" roads starting from the center of traffic as overhead structures, finish in the suburbs as surface or depressed railways. In old New York the "subway," starting as an underground tunnel, ends in the suburbs as an elevated structure. The enormous influence that the construction of rapid transit railroads has upon the value of land in the districts tributary to them points to the possibility of the construction of outlying lines by the assessment of the cost upon the property benefited. The assessment plan is particularly adapted to the construction of elevated extensions in undeveloped districts to connect with subways in the heart of the city. Elevated lines in the suburbs are less objectionable than in congested districts, and, moreover, with the exercise of wise foresight, a city might easily provide suburban streets and avenues of sufficient width so that elevated roads built in the center of them would not be in any sense a nuisance and would indeed provide an almost ideal means of rapid transit.

439. The Boston Transit Commission and the construction of the first Boston subway.—In 1893 a special act was passed by the Massachusetts legislature authorizing the mayor of the city of Boston to appoint, subject to confirmation by the

board of aldermen, three persons to constitute a board of subway commissioners.[1] This board was authorized "to lay out and construct a subway for street railway purposes sufficient to contain two or more parallel tracks, with suitable approaches, stations, exits and entrances." This subway was to be located principally under Tremont street. The city of Boston was authorized to incur indebtedness and issue bonds to an amount not exceeding two million dollars outside of the city's debt limit to pay the expense of constructing the subway. Subway bonds were to be payable in not more than fifty years and were to bear interest at not more than four per cent. Upon the completion of the subway, the commissioners were to have authority "to compel the cars of any lines of street railway running in or through said city, to run in or through said subway at such rate of compensation, to be paid by the railway company or companies using the same, to said city, as shall be determined by the board of railroad commissioners to be just and reasonable." The subway commissioners were also authorized to grant to any private corporation the right to place any pipes, wires or conduits in the subway on terms which they deemed just and reasonable. This act was to take effect upon its adoption by the city council.

In the following year, when the Boston Elevated Railway Company was incorporated, the legislature included in the act of incorporation additional provisions for the construction of a subway.[2] This act provided that the governor, with the advice and consent of the executive council, should appoint two "discreet persons," who with the subway commissioners appointed by the mayor under the act of the preceding year, should constitute the Boston Transit Commission and should hold office for a term of five years from the date of this act, July 2, 1894. Each member of the commission was to receive an annual salary of $5,000 or such other sum as the city council should provide. Vacancies were to be filled by the mayor or the governor, according as they occurred among the members originally appointed by the one or the other of those officials. This commission was required to choose a chairman and was authorized from time to time to choose a

[1] Massachusetts Statutes, 1893, Chapter 478.
[2] *Ibid.*, 1894, Chapter 548.

secretary and "such engineers, clerks, agents, officers, assistants and other employees," not of the members of the commission, as it might deem necessary. The commission was also authorized to determine the duties and compensation of such employees and to remove them at pleasure. It was required to keep accurate account of all its expenditures and make an annual report of its doings to the city council. This commission was given authority to construct a subway or subways of sufficient size for four tracks to be used by railway cars, with all the necessary approaches, entrances, sidings, stations, etc. These subways were to be constructed under Tremont and Boylston streets and under or in the vicinity of certain other enumerated streets. The commission was also empowered to construct a tunnel of sufficient size for two railway tracks running to East Boston. Before beginning the work of construction, the commission was to file in the office of the city surveyor, a plan showing the route or location of the portion of the subway about to be constructed. This plan was subject to alteration at any time by a new plan signed by the commissioners and filed in the same manner. Within the limits described in the act, the locations of the subways, tunnels, stations, etc., were to be in the discretion of the commission. Construction was to be so conducted that all streets and places under or near which a subway was being built would be open for traffic between eight o'clock in the morning and six o'clock in the afternoon. The commission was also required to construct a bridge over the Charles river, having regard to its use for railway purposes, and might in its discretion reconstruct one of the existing bridges. The commission was authorized to take by purchase or otherwise in fee any part or the whole of the property bounded by certain streets, and might take other lands, including buildings, which it deemed necessary to carry out the purposes of this act. It was also authorized to take, by purchase or otherwise, easements in lands, including the right to go under the surface or to go through or under buildings. Such lands or easements could be taken whether the property was already held under title derived through eminent domain, or otherwise. It was expressly stipulated that the taking of an easement in a given parcel of real estate, whether consisting of unimproved lands or

land and buildings, might be confined to a portion or section of the parcel fixed by horizontal planes of division either above, below or at the surface of the soil. The commission was authorized to remove buildings from lands which it had taken, and to sell or lease for improvement or otherwise any part of such lands or any interest in them, whenever, in its opinion, they were no longer required for subway purposes.

On or before the completion of the subways and tunnels, the commission could grant locations for tracks to the subways and for two tracks in them, to be used by street railways. All surface tracks were then to be removed from a certain section of Tremont street and Boylston street, and any other tracks which in the opinion of the commission had been rendered unnecessary by the construction of these subways or tunnels and which were located above them or within a distance of 1000 feet from any entrance to them, could also be removed from the streets. Subject to the approval of the board of railroad commissioners, the Boston Transit Commission was to fix by contract the terms and conditions and rates of compensation for the locations granted for two tracks in any of the subways or tunnels, but any such contract was to be limited to fifty years. Surface tracks were not to be maintained in the portion of any street from which the commission had ordered the tracks removed. The commission was authorized to order the temporary removal or relocation of any surface tracks on streets under or near which subways were to be constructed. Any person or corporation using, or authorized by law to use wires on the route of any such subway or tunnel was authorized to place them in it on terms which the commission might approve, and the commission was required to designate locations in or adjoining the subways or tunnels, for sewers, water pipes, or electrical conduits, and was authorized to fix the terms and conditions and the rates of compensation to be paid for such locations.

The amount of bonds that might be issued for subway purposes was increased to $7,000,000, and such further amount in addition to the $750,000 already appropriated as might be necessary for the completion of the Charlestown Bridge and its approaches. These bonds were to run for forty years and bear interest at not more than four per cent per annum.

The debt incurred, except the $750,000 already issued on account of the bridge, was not to be included in determining the city's limit of indebtedness. The Boston sinking fund commission was required to establish a sinking fund for the payment of the rapid transit bonds. All premiums received from the sale of bonds and all proceeds from the sale of lands or rights taken under this act were to be placed in the sinking fund. It was stipulated that all rents, percentages or other annual compensation received for the use of the subways, tunnels or adjacent locations, or for the use of any lands or rights taken by the commission under this act, should be used annually, first, to meet any deficiency in the sinking fund requirements of the bonds, and, second, to meet the interest on the bonds. The surplus, if any, was to be part of the city's revenue for the maintenance of its parks.

440. The lease of the Tremont Street Subway—Boston.—Pursuant to the authority granted by the acts described in the preceding section, the Boston Transit Commission undertook to build the subway in Tremont and Boylston streets, and on December 7, 1896, when this subway was nearly completed, the commission entered into a contract with the West End Street Railway Company for its exclusive use, for a period of twenty years dating from the time when the right to use the subway or any portion of it should first accrue. The commission was to determine when the use of the subway should begin and to notify the company of its decision in the matter. If, in the judgment of the commission, portions of the subway could be used to advantage before the completion of the whole, such use was to begin when, in the judgment of the commission, a reasonable time subsequent to the completion of such particular portion of the subway had been allowed to the company for its equipment. The rental to be paid by the company was fixed at a sum equal to four and seven-eighths per cent of $7,000,000, or of the net cost of the subway if that should be less than $7,000,000. The company was also to pay such additional compensation as would make its aggregate payments equal to a toll of five cents for each passage through the subway by a car not more than twenty-five feet in body length and at a proportionately greater rate for cars of greater length. Any car going through the subway in one direction and then

returning was to be considered as making two passages. Cars used for carrying the mails, construction and repair cars and motor cars pure and simple, were not to be included in computing the number of passages for which toll was to be charged. Extra payments on account of toll, if any, were to be made quarterly.

In determining the net cost of the subway, there was to be included "all lawful expenditures of every kind incurred by the Commission on account of the acquisition and construction" of its premises and property. In this amount was to be included sums paid on account of damages to property as well as for personal injuries. The incidental expenses of the commission, including the salaries of the commissioners, were also to be included. Interest at the rate of four per cent per annum on construction expenditures, accrued up to the time when the company should begin to use the subway, was to be reckoned in the cost. From the gross cost so ascertained, there was to be deducted all money that the commission might have received from the sale or other disposition of property or rights which had been included in estimating the gross cost, as well as a fair valuation of any property or rights so included which, though not actually disposed of, would not, in the judgment of the commission, be needed for the use of the company. After all such extra property and rights had been actually and finally disposed of, there was to be an adjustment of the cost of the subway and its additions upon the basis of the actual proceeds received from such disposition. At the time when the use of the whole or any part of the property was to begin, the commission was to submit to the company a statement of the net cost of the subway, "showing with reasonable detail what is included therein."

If at any time during the term of the lease the company should be deprived in whole or in part of the use of the subway by any cause resulting from "the act of God, public enemies, mobs, riots, the falling or settling of buildings, bursting of pipes outside the subway, explosions of gas, or works or excavations carried on or permitted by said city or other public authority, or the filling or caving in, or other physical obstruction of the subway, or any part thereof," not due to the company's negligence and not due to the location,

maintenance or use of the wires or other apparatus which the city was authorized to maintain in the subway, then the compensation to be paid by the company, or a just and reasonable part of it, was to be abated during such deprivation.

It was stipulated that the company should "suitably lay and maintain in first-class condition railway tracks in proper places in the subway, together with the appointments and apparatus necessary for the safe and convenient operation" of the railway and should provide and maintain "all wires, electrical or other apparatus or equipment necessary or convenient for the furnishing of power and light" in the subway. The company was also required to provide the "requisite pumps, fans and ventilating apparatus," and, in general, completely to "equip and furnish the subway with all machinery, piping, apparatus and furniture proper and adapted thereto and necessary for the convenient maintenance and operation of a railway therein, and for the safety and accommodation of the passengers upon said railway." The entire equipment provided by the company was to remain the company's property so long as it continued to occupy and use the subway under the provisions of this contract. Upon the termination of such use, the city was to take over and pay for the equipment at its then fair value to be determined by the board of railroad commissioners. The power to be used in the operation of the railway was to be "either electricity, compressed air, or some agent the use of which will not be accompanied by smoke, steam or any noxious products which might impair the purity of the atmosphere within the subway." The use and the manner of use of any motive power were to be subject to the approval of the commission, but the use of electricity was specifically approved by the contract. Neither steam nor animals were to be used in the subway as a motive power except temporarily in emergencies. The company was required to light the subway and the cars running through it suitably, adequately and to the satisfaction of the commission by electricity; or, as an alternative, the company might from time to time use "such other illuminating agents" as might be approved by the commission. It was stipulated, however, that "no iluminating gas of any description shall be used therein,

possess itself of the subway, unless the company's failure was due to causes over which it had no control. If the city exercised its right of re-entry, however, it would have to take over the company's equipment and pay for it at a valuation to be determined by the board of railroad commissioners. The company was forbidden to remove from the subway "any tracks, wires, apparatus, equipment or other property" necessary to the maintenance of the subway and the operation of a railway in it, "except for the purpose of repairs or renewal or for the substitution of equivalent structures, property, apparatus or equipment." In case of the termination of the contract prior to the expiration of the twenty-year period and the re-entry of the city of Boston into possession of the property, the company would have to indemnify the city for all loss and damages sustained during the remainder of the contract period by reason of such termination. It was stipulated that all powers of action reserved to the commission should, after the termination of the commission's existence, vest in the board of railroad commissioners, except as otherwise provided in the contract itself, until some other tribunal had been designated by law for the purpose.

The West End Street Railway Company, or any other company running cars in the subway, was to be subject with respect to the equipment and operation of its railway to the general laws at that time in force or thereafter enacted relating to street railways.

A portion of the original Boston subway was opened for use in 1897, and the entire work was completed in 1898. The net cost of the subway upon the basis of which the rentals of the Boston Elevated Railway Company were figured on June 30, 1909, was $4,100,864.[1] The rental received by the city for the year 1908–1909 amounted to $223,323, of which $11,578 was on account of tolls, representing the excess of the rental over a return of four and seven-eighths per cent on the net cost of the subway.

441. Construction and lease of the East Boston Tunnel.— The second subway constructed by the Boston Transit Commission is known as the East Boston Tunnel. It was built

[1] Fifteenth Annual Report of the Boston Transit Commission, for the year ending June 30, 1909, p. 17.

under the provisions of the act of 1897 amending the charter of the Boston Elevated Railway Company.[1] This act required that whenever the company should be authorized to begin the construction of its elevated railroad over the first route applied for, the Boston Transit Commission should construct a tunnel or tunnels of sufficient size for the operation of a double track railway from a point on or near Hanover street or some point suitable for a connection with the subway or subways constructed under authority of the act of 1894 incorporating the company and establishing the Boston Transit Commission, to a point at or near Maverick Square in East Boston. It was provided that "said tunnel or tunnels shall be constructed in a thorough and substantial manner, with special reference to strength, durability and safety for railway travel, and shall be water-tight, or in case of leakage the water shall be taken care of by said city." The act further provided that when the tunnel was completed it should be leased to the Boston Elevated Railway Company for a term of twenty-five years beginning with the passage of the act. The annual rental was to be three-eighths of one per. cent of the company's gross receipts on all the lines owned, leased or operated by it. The company was to have the exclusive use of the tunnel. The city was to collect from each person passing through the tunnel in either direction a toll of one cent, but if the rental plus the tolls collected amounted in any year to a sum sufficiently in excess of the interest and sinking fund requirements of the bonds issued on account of the tunnel to convince the board of railroad commissioners that the toll could be reduced, the board was authorized on petition of ten citizens to reduce the toll accordingly, for the next ensuing calendar year. Moreover, the toll could be discontinued altogether whenever in the opinion of the board of railroad commissioners the rental alone would meet the interest and sinking fund requirements. In case of a reduction of the toll below one cent, the lower rate was to be provided for by the sale of tickets, but the cash toll was to continue as before. The entire amount of the tolls and rentals were by this act pledged to meet the principal and interest of the bonds issued for the construction of the tunnel or tunnels, with the pro-

[1] Massachusetts Statutes, 1897, chapter 500.

possess itself of the subway, unless the company's failure was due to causes over which it had no control. If the city exercised its right of re-entry, however, it would have to take over the company's equipment and pay for it at a valuation to be determined by the board of railroad commissioners. The company was forbidden to remove from the subway "any tracks, wires, apparatus, equipment or other property" necessary to the maintenance of the subway and the operation of a railway in it, "except for the purpose of repairs or renewal or for the substitution of equivalent structures, property, apparatus or equipment." In case of the termination of the contract prior to the expiration of the twenty-year period and the re-entry of the city of Boston into possession of the property, the company would have to indemnify the city for all loss and damages sustained during the remainder of the contract period by reason of such termination. It was stipulated that all powers of action reserved to the commission should, after the termination of the commission's existence, vest in the board of railroad commissioners, except as otherwise provided in the contract itself, until some other tribunal had been designated by law for the purpose.

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[1] Massachusetts Statutes, 1897, chapter 500.

vision, however, that if at any time after the tolls had been discontinued, the rentals alone in any one year should prove to be more than sufficient to meet the debt charges, the excess over such requirements should be treated as general revenue of the city. In case the rentals and tolls collected should at any time prove insufficient to meet the fixed charges, then the city was to apply to that purpose so far as necessary any moneys received from the taxation of the company's property and franchises. The company was to act as the city's agent for the collection of the tolls.

It was not until December 24, 1904, that the lease of the East Boston Tunnel to the Boston Elevated Railway Company was finally effected. By the terms of this lease the use of the tunnel was to begin December 30, 1904, and was to expire as required by the act already described, twenty-five years from June 10, 1897, that is to say, on June 10, 1922. The rental and the tolls prescribed in the act were stipulated in the lease. The terms and conditions of the lease with reference to equipment, repairs, maintenance, liability for damages, incidental use by other companies and by the city, purchase in case of default or at the expiration of the term, etc., were substantially the same as the provisions in the lease of the Tremont street subway already described. The total cost of the East Boston Tunnel up to June 30, 1909, was $3,225,437.[1] The city's income from toll receipts after subtracting the cost of collection, was $107,663 during the year 1908–1909, and the rental paid by the company during the year 1908, being three-eighths of one per cent of the company's gross receipts for the year, amounted to $51,685.

442. Additional subways in Boston.—The Boston Transit Commission, whose existence was originally limited to a period of five years, was given a new lease of life from time to time by various acts of the Massachusetts legislature. In 1902, the legislature provided for the construction of a third subway which is known as the Washington Street Tunnel.[2] It was provided that within ninety days after the passage of the act authorizing the construction of this subway, the Boston Transit Commission should enter into a contract with the Boston Elevated Railway Company, with that com-

[1] Fifteenth Annual Report of the Boston Transit Commission, *already cited* p. 26.

[2] Massachusetts Statutes, 1902, Chapter 534.

pany's consent, for the exclusive use of the tunnel and subway for a period of twenty-five years from the beginning of such use, at an annual rental equal to four and one-half per cent of the net cost of the work. The net cost was to include all preliminary expenses of the commission, together with interest at three and one quarter per cent during the period of construction. The commission was not to proceed with the construction, however, unless the company entered into the contract as set forth and the act was accepted by the voters. One of the purposes of the Washington Street Tunnel was to provide accommodations for the company's elevated trains, so that they could be removed from the original subway, leaving it for the exclusive use of surface cars. The lease of the Washington Street Tunnel was effected by a contract dated September 25, 1902, between the city acting by the Boston Transit Commission and the Boston Elevated Railway Company. Under this contract the company was authorized not only to maintain booths for the sale of newspapers, periodicals and books, but also to admit "unobjectionable advertisements" in places specially adapted for the purpose, and to make "such other uses of the premises, not impairing the use for the transportation of passengers," as the board of railroad commissioners might from time to time approve. If, however, the board should at any time determine that these supplementary uses were diminishing or impairing the safety, accommodation, convenience or comfort of passengers, or were in conflict with the best interests of the public, the company agreed forthwith to discontinue such uses to the extent specified in a written notice from the board. Other provisions of the lease were similar to those contained in the leases of the original subway and the East Boston Tunnel.

The Washington Street Tunnel was constructed at a cost of nearly $8,000,000, and was opened for use November 30, 1908.

The construction of still another subway and tunnel in Boston to be known as the Riverbank Subway, has been authorized by the Massachusetts legislature, conditioned upon its being asked for or accepted by the Boston Elevated Railway Company.[1]

443. The Cambridge subway franchise.—In 1906, the

[1] Massachusetts Statutes, 1907, Chapter 573.

Boston Elevated Railway Company acquired a franchise direct from the Massachusetts legislature for the construction of certain subways in Main street and other streets in Cambridge, to be connected with the subways in Boston by means of the new Cambridge bridge over the Charles river.[1] The company was not to commence the construction of the Main street subway, however, until it had filed in the office of the city engineer, within twelve months after the acceptance of this act, a plan showing the proposed route and the general form and method of construction, with the location of proposed stations, tracks and approaches; nor until this plan had been submitted to the mayor for approval. Any such plan could be amended or altered at any time by a new plan. Within thirty days after the plan had been filed, whether the mayor had approved it or not, the company was to apply to the board of railroad commissioners to approve the plan or alter it as might be deemed necessary. The city was authorized to employ a competent engineer at the company's expense with whom to consult in regard to the plan and the construction of the subways authorized by the act. The company was given the right of eminent domain for the purpose of acquiring lands, rights of way and easements. It was provided by this act that "a taking or purchase of an easement or limited estate or right in a given parcel of real estate, whether such parcel consists of unimproved land or of land and buildings, may be confined to a part or section of such parcel, fixed by planes of division or otherwise, below, above or at the surface of the soil, and in such case no taking need be made of other parts or sections thereof except of such easements therein, if any, as the company may deem necessary." The process of acquiring land or easements by eminent domain was described as follows:

"To make any taking for subway purposes by right of eminent domain the company shall cause to be recorded in the registry of deeds of the southern district of the county of Middlesex, a description of the lands, easements, estates or rights taken, as certain as is required in a common conveyance of land, with a statement that the same are taken for subway purposes under the authority of this act, signed by a majority of its directors; and the lands, easements, estates or rights so described shall thereupon be taken for such purposes. The company shall at the same time give notice of such taking to the owner of the

[1] Massachusetts Statutes, 1906, Chapter 520.

property taken, if known, but want of such notice shall not affect the validity of the taking, nor extend the time for proceedings for damages."

On the written request of the company the mayor was to order the temporary or permanent removal or relocation of any surface tracks other than tracks of a steam railroad, or of any conduits, pipes, wires or other fixtures not belonging to the city or the company which the company deemed to interfere with the construction or operation of its subways. At the same time, however, the city was to grant new locations for all structures so removed. The work of relocating the fixtures was to be without expense to the Boston Elevated Railway Company except in the case of gas pipes and telephone or electric lighting conduits or cables. Fixtures of these kinds were to be removed by the company, the owner paying for any new material required, and the cost of the work so far as it formed a part of the cost of the subway to be repaid by the owner to the city, upon the purchase of the subway by the city. The mayor was authorized to require that whenever the company made an excavation in any public street or place, it should deliver such part of the surplus materials as it did not sell, at a point or points within two miles of the place of excavation as directed by the mayor. Such materials might be conveyed on street railway tracks already built or on street railways laid in temporary locations which the city was required to grant to the company upon request. So far as practicable, all subway work was to be done so as to leave each street or a reasonable part of it open for travel between seven o'clock in the morning and six o'clock in the afternoon of each secular day except holidays, but where deemed necessary by the company streets could be closed to public travel along the line of construction for distances not exceeding one-third of a mile.

The company was authorized to construct subway stations at convenient points, with suitable exits and approaches subject to the mayor's approval, but in case of any street less than sixty feet wide, all exits and approaches except platforms and approaches to them from buildings were to be located outside of the street limits. In case of any determination by the city or by any of its officials of any question arising in the course of the subway work, the company could appeal within seven days to the board of railroad commis-

sioners, which would have the final determination of the question at issue.

The company was not to enter into a contract with any other person or corporation for the placing of wires in the subway for a time extending beyond the period of twenty years from the opening of the subway for use, or extending beyond the purchase of the subway by the city. The company was required to file with the city auditor of accounts "correct copies of all bills or accounts of the cost of construction," as the work went on. Upon the completion of any subway, before it could be opened for public use it was to be examined by the board of railroad commissioners and a certificate was to be granted the company to the effect that the subway was in safe condition for operation.

By this act the company was required to give up its location for an elevated railway connecting the cities of Boston and Cambridge as set forth in the company's charter amendment of 1897, and, in lieu of an elevated route, it was to operate through a subway or tunnel which the Boston Transit Commission was authorized to build to connect existing subways in Boston with the new Cambridge bridge. Within six months after the acceptance of the act, the company was to request the commission to construct this tunnel or subway, and the commission was required to proceed with the construction upon plans determined by it, or revised by the board of railroad commissioners on appeal taken by the company. Any tunnel construction under or within one hundred feet of Boston Common was to be as far as practicable watertight, and the work was to be carried on so as to avoid the draining of moisture from the surrounding soil or the doing of other injury to trees.

The subways constructed by the company in Cambridge, together with their appurtenances, equipment and locations and the right to maintain them, were to be held by the company on the same tenure and with the same rights, privileges and immunities as had already been provided in respect to the company's elevated lines and structures. It was provided, however, that at any time after the expiration of twenty years from the opening for use of the Main street subway, or at any earlier time by agreement with the company, the city should have the right to take over the subway upon pay-

ment of such an amount as would reimburse the company for the original cost of the work, including the appurtenances and equipment of the subway, but not including rolling stock, together with the cost of all additions or alterations that had been lawfully made, with simple interest at seven per cent per annum on the cost paid in by the company's stockholders, to be computed from the date of such payment, but not prior to the opening of the subway, in addition to interest at three and one-quarter per cent per annum on all sums expended in construction, less any and all dividends that may have been declared up to the date of purchase. There were also to be subtracted from the purchase price any amounts accruing to the company from property acquired in connection with the construction of the subway, but not needed for subway purposes. The city was also to have the right to purchase any other subways constructed under this act in Cambridge.

444. Construction and operating conditions of the New York Subway.—The original subway of New York was built under a contract for construction and operation dated February 21, 1900. Under this contract the cost of the subway was to be met by funds supplied by the city. The contractor, on the other hand, was required to supply at his own expense "full and sufficient equipment, including all rolling stock, motors, boilers, engines, wires, subways, conduits and mechanisms, machinery, tools, implements and devices of every nature whatever, used for the generation or transmission of motive power, and including all power houses, real estate necessary therefor, or for the generation or transmission of motive power, and all apparatus for signalling and ventilation." The amount of the equipment was to be at least sufficient to furnish at one time trains of three cars on the local tracks at two-minute intervals and trains of four cars on the express tracks at five-minute intervals, each car having a minimum seating capacity of forty-eight persons. The motive power supplied was to be of such a character as not to require combustion in the tunnels or on the viaducts. The motors were to be of sufficient power to haul trains of five cars at an average of thirty-five miles an hour, with stations one and one-half miles apart, allowing ten seconds for each stop. The cars were to be constructed so as to

"facilitate to the utmost a quick discharge and loading of passengers." Both motors and cars were to be so designed as to have a handsome and attractive appearance inside and out. They were to be constructed of the best material and workmanship and special care was to be taken "to avoid all loose or rattling parts." Extra provision was also to be made for the thorough ventilation of the cars. The signalling devices were to be of the most approved and reliable character, with preference given to a system that would automatically stop a train in the event of a motorman failing to obey the danger signal. The general plans of the equipment, including the designs for cars and devices for signals and ventilation, were to be submitted to the board of rapid transit railroad commissioners for approval.

Coupled with the provisions for the construction of the subway and its equipment there was a lease of the road to the contractor for maintenance and operation for a period of fifty years from the date on which the subway should be declared complete by the rapid transit board. The subway was divided into four sections, however, and the contract provided that the term of the lease should be reckoned for each section from the date when the first section should be put into operation. Moreover, the contractor was given the right to a renewal of the lease for an additional period of twenty-five years, in case he made written demand on the rapid transit board not more than two years and not less than one year before the expiration of the original fifty-year term. The renewal lease was to be in the same form as the original, with the exception that the term was to be twenty-five years instead of fifty, that no provision was to be made for a further renewal and that the amount of the annual rental was to be readjusted. It was stipulated that the rental during the renewal period should not be less than the average amount of the annual rental for the ten calendar years of the original lease next preceding the contractor's demand for a renewal. Subject to this minimum requirement, the amount of the rental was to be agreed upon between the rapid transit board and the contractor, or, in case they could not agree, was to be fixed by arbitration or by appropriate suit or proceeding in the supreme court.

The title to the subway was to be in the city from the

beginning. The contractor under the original lease was required to pay an annual rental equal to the intrest on the bonds issued by the city to meet the cost of construction, plus a sum equal to one per cent on the whole amount of such bonds. A concession was made to the contractor, however, in regard to rentals in excess of interest on bonds during the first ten years of operation. It was stipulated that during the first five-year period, the excess should be such sum, not exceeding one per cent, as would equal the excess of the contractor's profits in the operation of the railroad over five per cent on the capital invested by him. During the second five-year period, the contractor was required to pay one-half of one per cent in excess of interest and an additional amount, not exceeding another one-half of one per cent, equal to the excess of the contractor's profits in operation over five per cent per annum on his investment. It was stipulated in regard to the interest charges that they should include interest on additional bonds issued for construction purposes subsequent to the commencement of operation. It was also stipulated that bonds issued to pay interest on bonds during construction, but not bonds issued to pay for rights, easements, privileges or property other than lands acquired in fee, should be included in the total of construction bonds on which the contractor was to pay interest. During the first ten years of operation, the contractor was to furnish the rapid transit board with quarterly statements showing the amount of capital invested in the enterprise, not including borrowed money; the gross receipts arising from the operation of the subway, and the operating expenses of the road, including actual expenditures for repairs and maintenance and for interest on borrowed money, but not making allowance otherwise for wear and depreciation. After the expiration of the first ten-year period, the contractor's quarterly statement was to show the gross receipts of the road. It was stipulated that the city comptroller, or the rapid transit board, should have the right to examine the contractor's books and put the officers or servants of the contractor under oath in order to verify any of these statements.

Under the construction provisions of the agreement the contractor bound himself to construct the railroad so that it should be "an intra-urban railway of the very best character

according to the highest modern standard, in respect of safety, speed and convenience and in all other respects." During the term of the lease the contractor agreed to operate the railroad "carefully and skilfully according to the highest known standards of railway operation." Local trains were to be run at an average speed, including station stops, of not less than fourteen miles an hour, while the speed of express trains was to be not less than thirty miles an hour. It was provided that the contractor should "so far as is practicable" meet all reasonable requirements of the public in respect to frequency and character of its railway service to the full capacity of the railroad. Provision was made for all-night operation. From half-past eleven to one o'clock and from five to six in the morning trains were to be run stopping at all stations at intervals of not more than ten minutes, and between one and five o'clock in the morning trains were to be run at least every fifteen minutes.

The contractor agreed to operate the railroad with the highest regard to the safety of passengers, employees and all other persons. Mechanical or other devices for safety were to be of the very best known character. The contractor was required to protect the city against all claims for personal injuries.

During the term of the lease, the contractor was to keep the railroad and the equipment in every part in thorough repair, and was to restore and replace every part that should wear out or cease to be useful so that at all times and at the termination of the lease, the railroad would be in "thoroughly good and solid condition and fully and perfectly equipped, presently ready for continuous and practical operation to the full limit of its capacity." If the contractor should unreasonably fail or refuse to remedy completely any loss, wear, decay or defect, the rapid transit board would have the right to do the necessary work and charge it up to the contractor, whose duty it was to "keep the stations, tunnels and all other parts of the railroad clean, free from unnecessary dampness, and in that and in all other respects in thoroughly good order and condition." The contractor was not to permit advertisements in the stations or cars which would interfere with the easy identification of stations or otherwise interfere with

efficient operation. The stations and cars were to be thoroughly heated and lighted so "that passengers may conveniently read therein." The contractor was to keep the waiting-rooms in clean and comfortable condition, and to provide in them proper seating capacity and good drinking water. He was also to provide in connection with stations suitable water-closets and was to keep them in sanitary condition. All tunnels, stations and cars were to be thoroughly ventilated with pure air. The tunnels were to be kept sufficiently lighted at all times to permit inspection of their tracks, walls and roofs.

The motive power was to be either electricity or compressed air. It was provided, however, that if "in the future development of the railway art, any method of generating or transmitting power superior to electricity and involving no combustion or other injury to the purity of the atmosphere in the tunnels or in the cars shall be discovered to be practicable, then the contractor shall have the right to adopt such different method if approved by the board."

The contractor was to provide all reasonable conveniences for the inspection of the railroad and its equipment by the rapid transit board, its members or its employees, who were to have access at any time upon authority of the board to any part of the railroad or its equipment or to any materials of the railroad in process of manufacture. It was expressly provided that the contractor should not at any time within three years before the end of the term of the lease "permit the equipment to be less in quantity or inferior in quality to the equipment as it shall have been at any prior time during the term of the lease."

It was stipulated that the contractor might use the railroad for the carriage of freight or express matter, on condition that such use "shall not to any extent or in any way interfere with the use of the railroad to its fullest capacity for all passengers who shall desire to be carried upon it." During the term of the lease, the contractor was to be "entitled to charge for a single fare upon the railroad the sum of five cents, but no more." It was stipulated, however, that he might provide special conveniences on not more than one car of each train, and collect from every passenger using such car a reasonable charge for such additional conveniences fur-

nished him. Not more than one smoking car was to be provided on each train.

At the termination of the lease, or of its renewal, the city was to buy and the contractor was to sell "the whole of the property of the contractor employed in and about the equipment, maintenance and operation of the railroad." The city's right to buy was to be protected by its lien on the equipment. The purchase was to be made "at a reasonable price, due regard being had to the condition, wear and tear of the property." The purchase price was to be fixed by agreement or by arbitration or by appropriate proceedings in court. At the termination of the lease, the city was to have the right, whether or not the purchase price had been ascertained or paid, "to take possession and use and operate" all the contractor's property, subject, however, to the city's liability to pay the value of the equipment when ascertained, with interest from the time of taking possession. The lease was not to be assignable except with the written approval of the rapid transit board.

Under the contract and lease just described, John B. McDonald, the original contractor, commenced the construction of the subway. Prior to the beginning of operation, however, he assigned his contract, with the approval of the rapid transit board to the Interborough Rapid Transit Company, a railroad corporation organized for the purpose of operating the subway and the elevated lines of Manhattan and The Bronx.

The subway constructed under this contract, which is known as "Contract No. 1," extends from the City Hall northward through the borough of Manhattan and into the borough of The Bronx by two branches.

Two years later, on July 21, 1902, the rapid transit board entered into a second contract for subway construction, known as "Contract No. 2," which was for the construction, equipment, maintenance and operation of the subway extension commencing at the Post Office and running south under Broadway to the Battery and thence under the East river to Brooklyn to the terminal of the Long Island Railroad at the intersection of Flatbush and Atlantic avenues. The terms of this contract were substantially the same as those of "Contract No. 1," with a few exceptions. The original

period of the lease was fixed at thirty-five years instead of fifty years. On the new route, no provision was made for separate express and local service, and the average speed of all trains, including station stops, was to be not less than twelve miles an hour. Moreover, "Contract No. 2" provided that "no posters, billboards or advertisements of any kind not necessary in the operation of the railroad shall be allowed at or in stations except with the written permission of the board revocable at any time, it being the policy of the City that public property shall not be obstructed, disfigured or made ugly by advertisements."

445. The legal procedure required for the construction of a rapid transit railroad in New York.—The construction of a subway in New York involves the overcoming of countless and almost insuperable difficulties. The legal procedure required is almost as complex and difficult as the physical process of construction. The present rapid transit law, which provides for the construction of subways, follows the precedent of the original rapid transit act of 1875 under which most of the elevated roads were built, in one important respect, namely, this: it recognizes the essentially public character of rapid transit projects born of the city's need. Congestion of population and resulting congestion in traffic and transit facilities have led the people of conservative New York to see that railroads of this type are of necessity public enterprises. In 1894, after the first serious attempt to bring about the construction of a subway had failed, largely through the unwillingness of private capital to finance the enterprise, the people of the city at a referendum election voted by an overwhelming majority of those who took part, in favor of municipal construction. Subsequent to this vote and as a result of the legislation that grew out of it, municipal construction was the only method lawfully open to the rapid transit authorities until the rapid transit amendments of 1909 were passed by the legislature.

The first step toward a subway consists in the laying out of the route, which is now a function of the public service commission for the first district as the successor of the old board of rapid transit railroad commissioners. A public hearing is held, and thereafter, if the commission sees fit, it adopts resolutions describing the route and the general plan

of construction, specifying the maximum number of tracks to be provided for along different portions of the route and as to whether at particular points the structure is to be a subway, a viaduct or an elevated extension. These resolutions are then transmitted to the board of estimate and apportionment of the city for concurrence. If the route and general plan of construction as laid out by the public service commission are approved by the board of estimate after a public hearing, they are then referred to the mayor. Although the mayor is chairman of the board of estimate, and has three votes out of a total of sixteen in that body, his separate and additional approval of the resolutions adopting a rapid transit route is required, and there is no power in the public service commission or any branch of the city government to overcome his disapproval. If, however, the mayor's approval is secured, it then becomes incumbent on the public service commission to attempt to secure the consent of the majority in interest of the abutting property owners along the line of the proposed route. If after a complete canvass it is found that the consents cannot be obtained,—and this is almost universally the case with reference to routes in the heart of the city,—the commission may apply to the appellate division of the supreme court, first or second judicial department, as the case may be, to appoint three commissioners to take evidence and determine whether or not the proposed rapid transit road ought to be constructed and operated. If these commissioners report favorably and their report is confirmed by the court, the route is at last validated. Thereupon, if the commission is in a position to proceed with the enterprise, its counsel prepares a form of contract and its engineer the detail plans of construction. After a form of contract has been drafted, the commission is required to hold a public hearing upon its terms and conditions. After the commission has adopted the form of contract, it must be submitted to the corporation counsel for his approval "as to form." After his approval has been secured and the detail plans have been prepared and adopted, the commission may advertise for bids. On account of the necessity for co-operation between the commission and the board of estimate and apportionment, it is customary for the commission to seek the advice of the board of estimate prior to the adoption of a form of contract

upon the general policy to be followed with particular reference to the question whether proposals shall be asked for construction only or for construction, equipment, maintenance and operation. If, after advertisement, bids are received, the commission opens them on a day set, and after due consideration awards the contracts. Even at this stage of proceedings, however, it is necessary to secure the approval of the board of estimate and apportionment authorizing the commission to execute the contracts aud providing funds from which the contractors are to be paid. If these requirements are successfully met, the commission may then execute the contracts, which become binding upon the city comptroller's certifying that the money required for carrying them out has been duly appropriated. At the end of this long, tedious procedure the work of construction may begin. There are still, however, great difficulties to be overcome in the acquisition of the necessary lands and easements at those points on the route where the subway runs through private property or through streets not yet legally opened

446. Political, financial and strategic difficulties involved in the construction of additional subways—New York.—It is small wonder that progress in the construction of subways, even in the face of an imperative need, continues to be an exasperatingly slow and painful process. The difficulties, naturally, are multiplied whenever there is a divergence in the policies favored by the public service commission and by the board of estimate and the mayor. By reason of the fact that the commission is an appointive body named by the governor of the state, while the board of estimate is a local body the control of which is regarded as the chief prize in local politics, the opportunities for dissension, to say nothing of mere divergence in opinion, are plentiful. The fact that the city is subject to a constitutional limitation in its debt incurring powers also complicates the situation, for the enormous growth of the city's indebtedness in recent years has fully kept pace with the tremendous increase in its wealth, so that it is constantly on the verge of its debt limit. The state constitution was amended in 1909 so as to relieve from the debt limit bonds issued for subway and dock purposes which are fully self-sustaining. It is to be noted, however, that under this constitutional amendment bonds cannot be issued

for subways merely on the expectation, even though that expectation is founded on an operating contract, that they will be self-sustaining. It is only after they have been issued within the debt limit and have as a matter of fact proven to be self-sustaining that they can be eliminated from consideration so as to release an equivalent amount of city credit to be used in providing funds for additional subways. But even these difficulties are not so serious as the fact that the existing subway is under the irrevocable control of a private company for a period of nearly seventy years, so far as the bulk of the line is concerned, without the company's being under any obligation whatever to extend its lines either by the construction of new subways or by their operation after they have been built by the city. The logic of municipal development and history points persistently to monopoly under public control as the only rational method of operating a local transit system. The city of New York is in a dilemma, therefore, either horn of which is ruinous. To invite competition in subway construction and operation runs counter to all the lessons of experience. On the other hand, to leave the existing company in the possession of its monopoly means that the development of the subway system, which has long been recognized as in a peculiar way a public function, will be absolutely controlled by private rather than public motives. If any one lesson is brought home with absolutely convincing force in the present difficulties of New York in regard to subway construction, it is the superlative wickedness of placing a municipal rapid transit system under the control of a private company for a long period of years without reserving the power of revocation and without imposing the obligation to build or operate reasonable extensions and provide all necessary service to meet the requirements of the community at the command of the public authorities who are responsible for the initiation and carrying out of public policies.[1]

447. Short-term leases or indeterminate grants for the future—New York.—The people of New York saw their mistake shortly after the contract for the original subway was granted, and the rapid transit act was amended so as to im-

[1] This section was written in August, 1910. In December, the present operating company, alarmed by prospective competition, made an offer which recognized the principle that the city should have the right to require the operation of extensions.

pose upon the rapid transit authorities the policy of short-term leases. It was claimed, however, that this policy did not offer sufficient inducements to private companies even to undertake the equipment and operation of subways constructed by the use of city funds, and for a few years there was a substantial deadlock in the subway situation, charged in many quarters to the handicap of this law. The evils of long-term franchises and contracts, from which the city was already suffering, were matched by the evils of the short-term franchise and contract which tended to prevent development and failed to recognize the natural permanence and continuity of all great public enterprises. In 1909, however, the legislature, upon the recommendation of the public service commission, adopted certain radical amendments to the rapid transit act, one of which opened the way for the utilization of private capital in the construction of subways under a long-term contract revocable at any time after the expiration of ten years upon the purchase of the property. This change in the law, coupled with the amendment authorizing the construction of rapid transit lines by special assessments on the property benefited, and the elimination of self-sustaining bond issues from the debt limit have removed some of the greatest difficulties in the way of subway development in New York City. There seems to be no reason to expect, however, that the slow-moving processes to which I have already referred will ever permit the city to overtake its need in subway construction, at least not until a long time after the growth of the city has been checked by causes that cannot now be clearly foreseen.

Under the amendments to the rapid transit act the public service commission, with the approval of the local authorities, may grant a franchise for the construction and operation of a subway by private capital. It is required, however, that in any such franchise there shall be a reservation to the city of the right to terminate the grant and purchase the subway and its equipment, including power plant, at any time after the expiration of ten years from the commencement of operation. The price that may be paid is limited to actual cost, plus fifteen per cent if the property is purchased immediately upon the expiration of the ten-year period. If purchase is deferred, however, it is provided that the price

at which the property can be taken over shall gradually decrease until at the end of the full term of the grant nothing shall be paid except for equipment. The franchise must provide that the gross income derived from the operation of the railroad, after deducting operating expenses, taxes, payments to reserve and sinking funds and not more than six per cent annual interest on the actual cost of construction and equipment, shall be divided share and share alike between the city and the grantee. At any time within one year prior to the date of the termination or forfeiture of the franchise by the city, or prior to the expiration of the full term of the grant, the public service commission may, with the approval of the board of estimate and apportionment, grant a new franchise or may enter into contracts for the equipment, maintenance or operation of the railroad or may itself operate the road. After the proposed franchise has been prepared and approved as to form by the local authorities, the commission may advertise for proposals or bids, all of which shall refer to the proposed certificate or franchise and shall offer the terms upon which the bidder will undertake to construct, equip, maintain and operate the railroad in so far as to set forth any or all of the following matters, as may be required by the commission: "(1) the annual interest desired upon the cost of construction and equipment prior to payment of any part of income or increase to the city; (2) the period at the end of which the plant and property except equipment . . . shall become the property of the city without compensation; (3) the amount of money for which galleries for subsurface structures to be paid for with public money in connection with the construction of such railroad will be constructed; (4) such transfer conveniences with other roads, specifications as to the cost of construction and other provisions as the commission may think proper to require." After receiving bids, the commission may reject all such proposals and readvertise, "or may accept any of such proposals as will, in the judgment of said commission, best promote the public interest and grant a franchise and execute such certificate accordingly, subject to the approval of the board of estimate and apportionment."

448. Form of contract offered for the Tri-Borough Rapid Transit Railroad—New York.—No subways have yet been

constructed under the section of the new law which I have just described. On September 1, 1910, however, the commission finally approved a form of contract which was later advertised to secure bids for the construction, equipment, maintenance and operation of the so-called Tri-Borough Rapid Transit Railroad, a project that if carried through under a single contract would probably require the investment of approximately $200,000,000 for construction and equipment. While no bids were received in response to this invitation, the form of contract is of especial interest as embodying the latest proposition for a subway franchise worked out under the terms of the most modern legislation on the subject. It constitutes a printed book of more than 450 pages and contains not only a detailed description of routes but also minute specifications for the construction and equipment of the subway, as well as an elaborate statement of the conditions of operation.

The contractor is required to furnish equipment sufficient for the operation of the following schedules for a period of at least two hours:

"Fully loaded express trains of ten (10) cars shall be operated over all main line express tracks at a headway not exceeding one and one-half (1½) minutes, and when so operating shall cover not less than twenty-five (25) miles per hour in the run from terminal to terminal of said main line express tracks, including the stops at intermediate stations. This service shall continue to the respective terminals of the branch lines at such headway and at such speed as the local conditions of the branch lines will permit.

"Fully loaded local trains of ten (10) cars shall be operated over all main line local tracks at a headway not exceeding one and one-half (1½) minutes and when so operating shall average not less than fifteen (15) miles per hour in the run from terminal to terminal of said main line local tracks including stops at stations. This service shall be divided between the respective branch lines as the traffic requires and shall be continued to the ends of these branch lines if this course is considered necessary by the commission."

The equipment under this form of contract includes tracks and all other appurtenances separable from the subway structure itself, as well as the requisite power houses and sub-stations.

The contractor is required to state the number of years during which he desires to hold possession of the railroad. He must also state the percentage of the cost of construction which he is willing to set aside in a separate fund for amor-

tization purposes and the rate of annual interest which he desires to be allowed on his entire investment. He is also required to state the rate of interest which the amortization fund shall be deemed to bear, compounded semi-annually. All of the contractor's accounts are to be kept in accordance with the public service commissions law and any uniform system that may be established from time to time by the commission. The cost of construction of the railroad, which is to be amortized during the period of the contract, is made up of the following items:

(1) "The actual and necessary net cost in money to the Contractor of all labor and materials entering into the construction of the Railroad, including premiums actually and necessarily paid on insurance against damages during construction."

(2) "The actual and necessary net cost in money to the Contractor of any real estate or interest therein acquired for terminals or storage yards, together with the actual and necessary expense in connection with such acquisition."

(3) "Taxes, assessments and interest actually and necessarily paid upon the other items of cost of construction prior to the beginning of operation of the railroad."

(4) "The sum actually and necessarily paid by the Contractor for superintendence, engineering and administration in and about the construction of the Railroad."

(5) "A sum for the actual and necessary organization and preliminary expenditures of the Contractor to be determined by the Commission."

The cost of equipment is to be made up of similar items except that nothing will be allowed for organization and preliminary expenditures or for premiums paid on damage insurance during the course of construction.

The contractor's gross income derived from the enterprise is to be distributed at the end of each quarter in the following way:

(1) The actual and necessary expenses of administration, maintenance and operation.

(2) Taxes and assessments.

(3) An amount to be prescribed by the commission after the end of the first three years of the contract term, to be set aside in a separate fund for depreciation, out of which shall be paid the cost of all repairs, replacements and renewals due to wear, obsolescence, inadequacy or age. Any amounts in this fund not currently needed for the purposes specified, must be invested and reinvested, and all accumulations and

accretions are to be added to the fund. Any portion of the depreciation fund which in the judgment of the commission may be at any time not needed for the purposes for which it was set aside will be transferred to the contingent reserve fund.

(4) A certain percentage of the cost of construction, to be named by the contractor, to be paid quarterly into an amortization fund and there to be invested and allowed to accumulate.

(5) A sum which in the judgment of the commission will be sufficient, with accrued interest and any premiums received from the sale of stocks and bonds, to pay off within a period of ten years, unless this period is extended by the commission, any discount on bonds issued for construction and equipment. Any balance remaining unused in this fund is to be transferred to the contingent reserve fund.

(6) One quarter of one per cent of the gross revenues which, with interest and accretions, shall constitute a contingent reserve fund. When this fund becomes equal to five per cent of the cost of construction and equipment, payments to the fund must be suspended and interest on the fund must be included in the gross receipts. If, however, the fund shall thereafter fall below such five per cent, payments will be resumed so as to keep the fund equal to that percentage of the capital investment. The contingent reserve fund is to be used to meet deficits in the operation of the railroad, in the amount available for the payment of interest on investment, and for other purposes which may from time to time be permitted by the commission. Any unexpended balance remaining in this fund at the termination of the contract is to be divided between the city and the contractor in equal shares.

(7) A percentage, to be named by the contractor, payable quarterly both to the contractor and to the city, upon their investments. It should be noted that a portion of the Tri-Borough Rapid Transit Railroad consists of certain sections of subway already constructed by the city or now under construction. The contractor's investment, for the purposes of this paragraph, is defined as meaning the cost of construction and equipment. The city's investment is defined as including the cost of construction of the portion of the rail-

road built by it but not the cost of bridges over the East river, except the rails and ties of the tracks; the net cost of real estate and easements acquired by the city for the portion of the railroad constructed by it; the net cost of all real estate or easements acquired by the city for the portion of the railroad constructed by the contractor, and interest at four and one-half per cent per annum upon items (1), (2) and (3), prior to the beginning of operation. If the revenues of the contractor are not sufficient to make these payments in full, the city and the contractor will be allowed interest in proportion to their respective investments.

(8) All amounts remaining are to be divided half and half between the contractor and the city.

The city comptroller and the commission are given the right to verify the contractor's financial statements from time to time by an examination of his books, records and memoranda and an examination under oath of his officers or servants. The amortization fund is to be held in trust by the contractor for the benefit of his bondholders and other creditors to whom he is indebted on account of the cost of construction. The contractor assumes the unqualified obligation to discharge the cost of construction at a rate to correspond with the increase of the amortization fund. It is provided that the construction or completion of the contractor's power houses and sub-stations may, with the consent of the commission, be suspended during a period of ten years from the date of the commencement of operation if during that period there shall be motive power available, supplied to the contractor by other parties. The contractor expressly agrees to keep the equipment at all times in thoroughly good order and repair and not to allow it at any time within three years before the end of the franchise term, "to be less in quantity or inferior in quality to the equipment as it shall have been at any prior time." The commission reserves the right to permit other parties including the city to use the tracks, structure and line equipment of the railroad, or any portion of it, on condition that the contractor shall not be deprived of "any portion of the use of the railroad that, in the opinion of the commission, is necessary for his operations." In case of such joint use, the new company or the city as the case may be, is to pay a proportionate part of the contractor's obligations. The con-

tractor is not authorized to charge for a single fare more than five cents, unless otherwise permitted by the commission. No part of the railroad or stations may be used for advertising purposes except that the contractor may post necessary information for the public relative to the running of trains, and no trade, traffic or occupation other than required for the operation of the railroad is to be allowed in the subway, except such sale of newspapers and periodicals as may from time to time be permitted by the commission subject to revocation. The contractor is required to heat the stations and cars and to furnish light so that passengers may conveniently read while travelling. The waiting-rooms are to be kept clean and comfortable and to be provided with seating capacity and good drinking water. The tunnels, stations and cars of the railroad are to be thoroughly ventilated with pure air, artificial ventilation being used when needed. During the term of the franchise, the contractor is required to keep the railroad and its equipment in thorough repair and to restore and replace every part of it which may wear out or cease to be useful, so that at all times the railroad shall be "in thoroughly good and solid condition and fully and perfectly equipped presently ready for continuous and practical operation to the full limit of its capacity."

The cost of construction or of additions or changes in the railroad, or of additional equipment required by the commission, is to be determined by the commission's engineer. Either the commission or the contractor, if dissatisfied with the engineer's determination as to any item or items, may within twenty days after the receipt of such determination, file with the engineer a written statement of the item or items to which objection is made. In that case, the engineer is required to reconsider his determination and make a redetermination of the matter in connection with his report for the succeeding quarter. Either the commission or the contractor may then appeal from the engineer's determination to a board of arbitration, consisting of three persons of whom one is to be appointed by the commission and one by the contractor, and the third by joint action of both parties. But if the commission and the contractor fail to agree on the third arbitrator within a certain limited time, the third arbitrator is to be named by the executive committee for the

time being of the Chamber of Commerce of the State of New York, or if that committee declines to act, then the third arbitrator is to be named by the executive committee of the Association of the Bar of the City of New York. Elaborate provisions are made for the enforcement of the contractor's financial and other obligations to the city.

If the city terminates the contract at the end of ten years from the commencement of operation, it will be required to pay for the equipment a price to be determined by arbitration, and for the railroad the cost of construction remaining unamortized, plus a fifteen per cent bonus on the entire cost of construction. In case the contract is not immediately terminated, however, the amount of the bonus required will gradually diminish, until at the end of twenty-five years from the date of operation, no bonus at all need be paid. At the option of the city, the title to the equipment and the right to possess the railroad are to be transferred by the contractor directly to a new contractor upon his paying for the property the amount which the city would have been required to pay at the same time. The contractor further agrees to equip, maintain and operate, or to provide rolling stock for and operate, any railroad or railroads constructed by the city, which in the opinion of the commission are proper extensions of the railroad originally provided for in the contract, upon terms to be specified by the commission, on condition, however, that the contractor's interest on investment, including the investment in such extensions, shall not by reason of the operation of the extensions be reduced below the rate provided for in the contract. If the contractor, in advance of the equipment and operation of any such extensions sets up the claim that the interest rate to which he is entitled will be reduced thereby, he must nevertheless, under the direction of the commission equip the extensions or provide rolling stock for them for a period of one year. If at the end of that time it is demonstrated to the satisfaction of the commission, that the contractor's interest on investment is in fact being reduced below the rate specified in the contract by reason of the operation of such extensions, either the commission must make such modifications in the terms and conditions of operation as will increase the contractor's interest on investment to the rate specified, or the contractor will

have the right to discontinue the operation of such extensions, and in that case the city will be bound to purchase from him the equipment which he has provided for them.

449. The New York franchises of the McAdoo Tunnels.— In addition to the provisions of the rapid transit act authorizing the laying out and construction of rapid transit railroads, there are certain provisions authorizing the granting of franchises to tunnel railroad companies. The only tunnel railroads constructed under certificates from the rapid transit board that have yet been put into operation are those constructed by the Hudson and Manhattan Railroad Company, known as the "McAdoo Tunnels," which form part of an interstate passenger subway connecting the borough of Manhattan with Jersey City and Hoboken; and the "Pennsylvania Tunnels," which form a part of the through route of a trunk line railroad. The McAdoo system of railways includes two divisions, which are not connected with each other on the New York side. Separate franchises were originally granted to two distinct companies for the construction of the portions of these tunnel railroads that are situated in the state of New York.

The franchise for the lower tunnels leading to the Hudson terminal buildings at Greenwich, Cortlandt, Church and Fulton streets was granted to the Hudson and Manhattan Railroad Company by certificate dated November 24, 1903, and later approved by the board of aldermen, the mayor, the sinking fund commission and the department of docks and ferries.[1] This franchise included the right to acquire and maintain a downtown terminal and station, and to occupy for the purpose not only private property acquired in a certain city block described in the grant, but also the underground portions of the contiguous streets. This franchise, so far as it related to the maintenance and operation of a railroad, was granted in perpetuity. It was stipulated, however, that at the option of the rapid transit board the franchise should become void unless within a year after its acceptance the company had obtained the consent of the owners of one-half in value of the property abutting upon that portion of each street under which the railroad was to be constructed, or

[1] *See* Minutes of the Board of Rapid Transit Railroad Commissioners, Vol. 5, p. 2588.

had obtained, in lieu of such consent, a favorable determination of commissioners, confirmed by the appellate division of the supreme court, authorizing the construction and operation of the road. Moreover, the company was required to begin construction within three months after it had obtained the necessary consents and to complete the railroad within five years after construction had begun. The company's time might be extended, however, for reasonable cause shown, and in any case the company would be entitled to an extension of time equivalent to "the total period of delay caused by injunction or by necessary proceedings for condemnation of real estate, easements or other property, so far as such proceedings shall necessarily prevent the Tunnel Company from prosecuting such construction," but no delay on account of such legal proceedings was to be allowed until the company had given written notice to the rapid transit board relating to such proceedings, and, upon the board's request, had consented to the intervention of the board in the litigation.

The compensation to be paid for this franchise was to consist of several items. The first item was to be $100 a year for twenty-five years from the commencement of actual operation for the right to build the tunnels under the bed of the Hudson river outside of the pier head lines. The second item was to be a sum equal to fifty cents a year for a period of ten years after the commencement of operation for each linear foot of single railway track constructed under the docks and bulkheads of the city, and one dollar per foot annually during the period of fifteen years next thereafter. For the right to occupy a portion of certain public streets, the company was to pay fifty cents a year for each linear foot of single track railway for the period of ten years after the commencement of operation and one dollar per foot annually for the fifteen years next thereafter. For the use of the underground portions of certain streets contiguous to its terminal station, the company was to pay a sum annually equal to forty cents per superficial square foot of space occupied. At the end of ten years after the commencement of operation, this sum was to be doubled, and so to continue for an additional period of fifteen years. The company was also required to pay during the first ten years of operation, the

annual sum of $9,000, and for the next fifteen years, the annual sum of $15,000, these sums being estimated as three and five per cent, respectively, of the company's gross revenues. For the purpose of this franchise, the gross revenues of the New York portion of the railroad were estimated and fixed at $300,000 per annum. All these payments were to be made to the city comptroller in quarterly instalments on the first days of January, April, July and October of each year. The amounts to be paid annually were to be readjusted at the end of the first period of twenty-five years, and once every twenty-five years thereafter. The readjustment was to be agreed upon between the city and the company, or, if they could not agree, the compensation was to be an amount determined by the supreme court to be reasonable.

The company was required at all times by suitable bridging or other supports to "maintain and support in an entirely safe condition for their usual service and to the reasonable satisfaction of the owners, all elevated railroad structures, street tramways of whatever character, water and gas mains, steam pipes, pneumatic tubes, electric subways, sewers, drains, and all other surface or subsurface structures encountered during the progress of the work." The company was required to give the city and all other companies or persons owning or having charge of any of these structures along any part of the work notice at least one week in advance when it was about to commence operations, and the company was bound to carry on its work in co-operation with such officials, persons or corporations. Whenever it became necessary to cut, move, change or reconstruct any of such surface or subsurface structures, the work was to be done to the reasonable satisfaction of the owners and, if they so desired, by the owners themselves, but at the expense of the company. This expense was not to exceed, however, the actual cost of labor and materials used, together with a reasonable allowance not exceeding seven and one-half per cent for the use of plant and tools.

The company's tracks were to be constructed on the most approved plan, "so as to avoid noise or tremor." All plans were to be subject to the approval of the rapid transit board. Electricity, or some other power not involving combustion and approved by the rapid transit board, was to be used for

had obtained, in lieu of such consent, a favorable determination of commissioners, confirmed by the appellate division of the supreme court, authorizing the construction and operation of the road. Moreover, the company was required to begin construction within three months after it had obtained the necessary consents and to complete the railroad within five years after construction had begun. The company's time might be extended, however, for reasonable cause shown, and in any case the company would be entitled to an extension of time equivalent to "the total period of delay caused by injunction or by necessary proceedings for condemnation of real estate, easements or other property, so far as such proceedings shall necessarily prevent the Tunnel Company from prosecuting such construction," but no delay on account of such legal proceedings was to be allowed until the company had given written notice to the rapid transit board relating to such proceedings, and, upon the board's request, had consented to the intervention of the board in the litigation.

The compensation to be paid for this franchise was to consist of several items. The first item was to be $100 a year for twenty-five years from the commencement of actual operation for the right to build the tunnels under the bed of the Hudson river outside of the pier head lines. The second item was to be a sum equal to fifty cents a year for a period of ten years after the commencement of operation for each linear foot of single railway track constructed under the docks and bulkheads of the city, and one dollar per foot annually during the period of fifteen years next thereafter. For the right to occupy a portion of certain public streets, the company was to pay fifty cents a year for each linear foot of single track railway for the period of ten years after the commencement of operation and one dollar per foot annually for the fifteen years next thereafter. For the use of the underground portions of certain streets contiguous to its terminal station, the company was to pay a sum annually equal to forty cents per superficial square foot of space occupied. At the end of ten years after the commencement of operation, this sum was to be doubled, and so to continue for an additional period of fifteen years. The company was also required to pay during the first ten years of operation, the

annual sum of $9,000, and for the next fifteen years, the annual sum of $15,000, these sums being estimated as three and five per cent, respectively, of the company's gross revenues. For the purpose of this franchise, the gross revenues of the New York portion of the railroad were estimated and fixed at $300,000 per annum. All these payments were to be made to the city comptroller in quarterly instalments on the first days of January, April, July and October of each year. The amounts to be paid annually were to be readjusted at the end of the first period of twenty-five years, and once every twenty-five years thereafter. The readjustment was to be agreed upon between the city and the company, or, if they could not agree, the compensation was to be an amount determined by the supreme court to be reasonable.

The company was required at all times by suitable bridging or other supports to "maintain and support in an entirely safe condition for their usual service and to the reasonable satisfaction of the owners, all elevated railroad structures, street tramways of whatever character, water and gas mains, steam pipes, pneumatic tubes, electric subways, sewers, drains, and all other surface or subsurface structures encountered during the progress of the work." The company was required to give the city and all other companies or persons owning or having charge of any of these structures along any part of the work notice at least one week in advance when it was about to commence operations, and the company was bound to carry on its work in co-operation with such officials, persons or corporations. Whenever it became necessary to cut, move, change or reconstruct any of such surface or subsurface structures, the work was to be done to the reasonable satisfaction of the owners and, if they so desired, by the owners themselves, but at the expense of the company. This expense was not to exceed, however, the actual cost of labor and materials used, together with a reasonable allowance not exceeding seven and one-half per cent for the use of plant and tools.

The company's tracks were to be constructed on the most approved plan, "so as to avoid noise or tremor." All plans were to be subject to the approval of the rapid transit board. Electricity, or some other power not involving combustion and approved by the rapid transit board, was to be used for

the operation of the railroad. The company was not authorized to carry on merely local traffic unless with the approval of the rapid transit board and the local authorities and for such additional consideration to be paid to the city as they might prescribe. Local traffic was defined as including the carriage of passengers or freight between the company's terminal station and any other point in the city, or between stations in the city. The company bound itself to consent upon the request of the rapid transit board to the construction of any other railway over, along or under any portion of any of the streets occupied by it whenever such new railway would not actually interfere with this company's structures. Furthermore, the city reserved the right to require a readjustment or relocation of those portions of the company's tunnels and terminal stations under certain streets, but this right was to be exercised only when some rapid transit railroad or other municipal use of such streets was of materially greater importance than the cost and inconvenience incident to such readjustment. Any such alteration was to be done, however, at the expense of the city, and the company was to be indemnified against all loss resulting therefrom, including the loss from any suspension or delay of traffic. The company was given the right to mortgage, assign or transfer its franchise on condition that every assignee or transferee other than a mortgagee, but including any purchaser under foreclosure, should be a corporation subject to the laws of the state of New York and should, upon accepting the assignment or transfer, assume to perform all the obligations of the company.

The original franchise for the upper tunnels had been granted to the New York and Jersey Railroad Company by certificate dated July 10, 1902.[1] This grant was for a tunnel railroad from the state boundary line, under the Hudson river and the dock and bulkhead property to Morton street, and thence running under Morton street, Greenwich street and Christopher street to a terminal in the block bounded by Christopher, West Tenth, Greenwich and Hudson streets. The terms and conditions of this franchise were substantially the same as those of the franchise for the lower tunnels already described.

[1] *See* Minutes of the Board of Rapid Transit Railroad Commissioners, Vol. 4, p. 1911.

By another certificate dated February 2, 1905, the New York and Jersey Railroad Company acquired the right to extend its tunnel railroad through Christopher street to Sixth avenue and up Sixth avenue to Thirty-third street, with a branch running easterly through Ninth street to a terminal station at Fourth avenue, there to connect with the subway owned by the city.[1] It was the company's plan to transfer its terminal to Thirty-third street and Sixth avenue where passengers could be transferred to and from the projected Pennsylvania Railroad station. This extension franchise was in most respects similar to the original grants for the lower and upper tunnels, which have already been described. The city reserved, however, the right, at any time after the expiration of twenty-five years from the commencement of operation, to purchase the portion of the railroad under Sixth avenue or the portion under Ninth street, whenever in its judgment either of these portions was "necessary or desirable for use as a part of some municipal system of rapid transit to be owned by The City." At least two years' written notice of such intended purchase was to be given to the company and the purchase price was to be determined by agreement or by appraisal, but was not to include the value of the franchise and was not to exceed "the actual cost in money of the construction of the said portion of said tunnel and railroad, including cost of stations, real estate, and any and all easements, structures and property connected therewith, as the same exist at the time when the said option shall be exercised." The rapid transit board reserved the right to inspect these portions of the railroad during construction, to inspect and approve all materials used in the construction of the railroad and to examine from time to time the company's books, contracts and papers relating to these portions of the railroad for the purpose of ascertaining the actual cost of construction. As soon as construction was completed, the company was to present to the rapid transit board a written statement of the cost of construction of the portions of the tunnel railroad subject to future purchase. It was stipulated that if this statement should be approved by the rapid transit board, both parties would be estopped from raising any question as to the actual

[1] Minutes of the Board of Rapid Transit Railroad Commissioners, Vol. 6, p. 3190.

cost of construction so far as it was completed at the date of the statement. The cost of additions and improvements subsequently made was to be reported in like manner. In case the rapid transit board should refuse to approve any statement of cost furnished by the company, the actual cost was to be determined as soon as possible by a board of arbitration. In case it should prove necessary to submit the question of the revaluation of the grant or the appraisal of the property to arbitration, the city and the company were each to name an arbitrator, and in case either of the parties on request from the other should fail within ten days to name an arbitrator, the one named by the party making the request would be the sole arbitrator. The two arbitrators representing the parties in interest were to select a third, but if they failed to do so within fifteen days after the appointment of the second, the third arbitrator was to be nominated by the executive committee of the Chamber of Commerce of the State of New York, or in case that committee declined to make a nomination, the third arbitrator was to be named by the executive committee of the Association of the Bar of the City of New York. All fees and expenses of the arbitrators were to be borne and paid share and share alike by the city and the company.

Subsequent to the granting of the franchises for the lower and upper tunnels, the two companies were consolidated in 1906 with the New Jersey company holding the franchises for the portions of the tunnel railroad system located in that state. The consolidated company took the name of the Hudson and Manhattan Railroad Company and was incorporated in both New York and New Jersey. Subsequently, the company changed its plan by abandoning its Thirty-third street terminal and applying to the public service commission, successor of the rapid transit board, for an extension of its route northerly under Sixth avenue and easterly under Forty-second street to the Grand Central station. The franchise extension sought was granted by the commission by a certificate dated May 4, 1909. In this certificate the commission reserved the right to purchase this extension at any time subsequent to January 1, 1935, or subsequent to any prior date when the city's option under the preceding franchise extension would become effective. It was stipulated

that no assignment, transfer or mortgage covering this extension franchise, should be valid until it had been approved by the public service commission. The grade of the extension at different points in Sixth avenue and Forty-second street was fixed by the franchise so as to interfere as little as possible with the construction of future subways laid out by the rapid transit authorities of the city.

450. Provisions for subways in the Chicago traction ordinances.—Chicago has maintained for a great many years certain tunnels under the Chicago river. The first definite step taken toward the construction of a system of passenger subways to relieve surface traffic in the heart of the city was the inclusion of certain provisions relating to subways in the traction ordinances of 1907. Under these ordinances, the city reserved the power to require the Chicago City Railway Company and the Chicago Railways Company to join with it in defraying the cost of construction of a system of subways for the joint use of these companies as downtown terminals of their street railway systems and for the use of the city and its licensees. It was agreed that the title to the subways should be in the city, but that if the companies joined in defraying the cost of construction, the system of subways should not be used for street railway purposes during the life of the franchises of these companies except by their street railway systems. The amount which the companies could be required at first to contribute toward subway construction was limited, however, to $5,000,000, exclusive of the cost of reconstructing the existing tunnels under the Chicago river, or of converting them into a part of the subway system. Before the companies could be required to join in defraying the cost of the construction of the subways, the city was to authorize such construction by an ordinance prescribing the location, character and extent of the system and the plans and specifications therefor. This ordinance was to specify the portions of the system to be devoted to the use of the companies and to the use of the city and its licensees, and was to regulate the manner of such uses and to specify the share of the cost to be borne by the companies and the extent of the user to which each company would be entitled in the part of the system devoted to street railway purposes; and the companies could not be required to contribute to the cost of

subways until the board of supervising engineers, appointed under the terms of the traction ordinances as already explained in an earlier chapter, had approved the location, character and extent of the subway system and the plans and specifications for its construction. Subject to the same conditions, the companies might be required by ordinance after the completion of the original subway system and after the expiration of five years from the time of the acceptance of the traction ordinances, to join with the city in defraying the cost of extensions and additions to the subways. Under the traction ordinances, the companies expressly admitted the city's right to construct subways under any or all of the streets in which the companies had tracks. It was also stipulated that nothing in these ordinances should be construed as giving the city power to require the company, in case a subway system was constructed and their railway tracks were placed in it, to cease operation during the term of the franchises on the surface of the streets occupied by the subways so long as the city should permit the construction or operation of any street railways on the surface of such streets. It was also stipulated that in case the capacity of the portion of the subway system devoted to street railway purposes should at any time be greater than necessarily or properly required for the use of the companies which had contributed to the cost of such subway, the city might require any other company, operating elevated railways, to use the subway system or any part of it to the extent of such surplus capacity, on paying a reasonable rental for such use, to be apportioned between the parties originally contributing to the cost of construction according to the amounts of such contributions. The city reserved the right to use the subways for a municipal elevated railway to the same extent that it might authorize or require their use by an elevated railway company, and upon the same terms.

Since the adoption of the traction ordinances in 1907, the street railway companies have been busy with the rehabilitation of their surface lines. The city has meanwhile been investigating the subway question, and within a few years Chicago will doubtless join New York and Boston in the provision of these most expensive and, for a great congested urban center, most necessary links in local transit facilities.

451. A franchise for telephone and freight tunnels combined – Chicago.—By an ordinance passed by the city council of Chicago, February 20, 1899, authority was given to the Illinois Telephone and Telegraph Company, its assigns and lessees, "to construct, maintain, repair and operate, in the streets, avenues, alleys and tunnels, and other public places in the city of Chicago and under the Chicago River and its several branches for and during the term of thirty (30) years from the passage of this ordinance, a line or lines of conduits and wires, or other electrical conductors, together with all necessary feeders and service wires, or other electrical conductors, to be used for the transmission of sound, signals and intelligence, by means of electricity or otherwise."[1]

This franchise was ostensibly a telephone grant, but a few years later, the city authorities awoke to the fact that the company had constructed, deep down under the streets, many miles of tunnels designed for freight transportation. Accordingly, on July 15, 1903, the city council passed another ordinance granting the same company, its successors and assigns, the right "to construct, maintain, repair and operate in and through tunnels which had been constructed under the terms of an ordinance of February 20, 1899, or which may hereafter be constructed under this ordinance or under the ordinance of Februaray 20, 1899, for and during the term of said ordinance of February 20, 1899, not only wires and electrical conductors as provided in said last mentioned ordinance, but also any appliance or apparatus for the transmission and transportation of newspapers, mail matter, packages, parcels or merchandise." It was stipulated that at the expiration of the original franchise, that is to say, on February 19, 1929, "all tunnels and conduits heretofore constructed and all tunnels hereafter constructed under said ordinances, shall without the payment of any consideration, become and be the absolute property of the City of Chicago, free from liens and incumbrances." This ordinance was amended, however, five days later and before its acceptance, so as to read that the tunnels should become the property of the city "without the payment of any *further consideration in addition to that contained in the grant herein made.*"

[1] This ordinance and its amendments passed in 1903 have been published as a separate pamphlet by the Committee on Gas, Oil and Electricity, of the Chicago City Council, November, 1903.

It was further stipulated that the company's tunnels or conduits should conform to certain requirements as to size and location.

"Trunk or main line tunnels," said the ordinance, "shall not be more than twelve feet nine inches in width and fourteen feet in height; the small tunnels shall not be more than six feet in width and seven feet six inches in height. The highest portion or top of the crown of any such tunnels or conduits shall be located at a depth of not less than nineteen feet below city datum."

It was provided that trunk line tunnels might be constructed on certain specified streets in the central business district of the city, and that outside of this district small tunnels and also trunk line tunnels could be constructed by the company as required by its business, provided that the trunk line tunnels should not be located closer than one-half mile apart, except as to diagonal or intersecting lines.

Before receiving any permit for the construction of tunnels, the company was to file plans with the commissioner of public works showing the location and character of its proposed tunnels, and the time within which the construction work was to be done. It was specifically provided that permits for trunk line tunnels in streets not mentioned by name in the company's franchises, should be issued only on the approval of the mayor or the city council. It was also expressly provided that no large or trunk tunnels should be constructed after the expiration of ten years from the date of this ordinance, July 15, 1903. The company was required upon order of the mayor or city council to lower all of its tunnels or conduits already constructed so that the crown of the tunnel in all cases would not be less than nineteen feet below the city datum. The city also reserved the right to compel tunnels, conduits or manholes constructed under this company's franchises, to be lowered, altered or removed whenever necessary for the construction of water tunnels or subways to be used in whole or in part for street railway purposes. The company was required to provide the city with free space in all its tunnels or conduits for the use of the city telegraph, electric light and telephone wires.

The construction and use of the tunnels and conduits and all appliances and apparatus connected with them for the transaction of the company's business were to be subject to

the reasonable rules and regulations of the city departments, and by an amendment of July 20, 1903, "to such reasonable requirements as may from time to time be made by the City Council with reference to said Company." It was provided that "all the work contemplated by this ordinance, including the thickness of tunnel walls and bottom, the composition and method of mixing concrete used and the method of construction, and place of location in the streets," should be done subject to the approval of the commissioner of public works and under his supervision. This official was given authority to stop the work whenever the method of construction or the material used did not meet with his approval, or whenever the private property or the underground work of the city was being endangered by the work.

The company agreed by the acceptance of this ordinance of July 15, 1903, to furnish its patrons in the various classes of service provided for in the original and the new franchise "the best possible service and to maintain its entire equipment in all of said classes of service at the highest and best practicable standard known to modern invention and mechanical skill, as developed from time to time during the term of this grant, and to make its patrons no extra charge for any improvements hereafter in its service or equipment." Permission was granted to the company, whenever required by its business, "to connect up" any of its tunnels underneath the streets with the abutting lots, the owners or lessees of the lots consenting to such connections. The company was also authorized to connect up the tunnels with its branch offices or delivery stations "by proper passageways or connecting tunnels, on the same level as the tunnel with which they connect." The company was authorized to "lease, but not beyond the term of this grant, subject to the rights for space reserved to the City," space in its tunnels "only to such persons or corporations as may hereafter be authorized by the city to conduct or carry on business in or through conduits or tunnels," but in all cases a certified copy of any such lease was to be filed with the city comptroller. It was expressly stipulated that nothing contained in this ordinance should authorize the company "to maintain or operate cars or vehicles of any kind in its said tunnels for the conveyance or transportation of passengers, nor shall it have the right

had obtained, in lieu of such consent, a favorable determination of commissioners, confirmed by the appellate division of the supreme court, authorizing the construction and operation of the road. Moreover, the company was required to begin construction within three months after it had obtained the necessary consents and to complete the railroad within five years after construction had begun. The company's time might be extended, however, for reasonable cause shown, and in any case the company would be entitled to an extension of time equivalent to "the total period of delay caused by injunction or by necessary proceedings for condemnation of real estate, easements or other property, so far as such proceedings shall necessarily prevent the Tunnel Company from prosecuting such construction," but no delay on account of such legal proceedings was to be allowed until the company had given written notice to the rapid transit board relating to such proceedings, and, upon the board's request, had consented to the intervention of the board in the litigation.

The compensation to be paid for this franchise was to consist of several items. The first item was to be $100 a year for twenty-five years from the commencement of actual operation for the right to build the tunnels under the bed of the Hudson river outside of the pier head lines. The second item was to be a sum equal to fifty cents a year for a period of ten years after the commencement of operation for each linear foot of single railway track constructed under the docks and bulkheads of the city, and one dollar per foot annually during the period of fifteen years next thereafter. For the right to occupy a portion of certain public streets, the company was to pay fifty cents a year for each linear foot of single track railway for the period of ten years after the commencement of operation and one dollar per foot annually for the fifteen years next thereafter. For the use of the underground portions of certain streets contiguous to its terminal station, the company was to pay a sum annually equal to forty cents per superficial square foot of space occupied. At the end of ten years after the commencement of operation, this sum was to be doubled, and so to continue for an additional period of fifteen years. The company was also required to pay during the first ten years of operation, the

annual sum of $9,000, and for the next fifteen years, the annual sum of $15,000, these sums being estimated as three and five per cent, respectively, of the company's gross revenues. For the purpose of this franchise, the gross revenues of the New York portion of the railroad were estimated and fixed at $300,000 per annum. All these payments were to be made to the city comptroller in quarterly instalments on the first days of January, April, July and October of each year. The amounts to be paid annually were to be readjusted at the end of the first period of twenty-five years, and once every twenty-five years thereafter. The readjustment was to be agreed upon between the city and the company, or, if they could not agree, the compensation was to be an amount determined by the supreme court to be reasonable.

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the operation of the railroad. The company was not authorized to carry on merely local traffic unless with the approval of the rapid transit board and the local authorities and for such additional consideration to be paid to the city as they might prescribe. Local traffic was defined as including the carriage of passengers or freight between the company's terminal station and any other point in the city, or between stations in the city. The company bound itself to consent upon the request of the rapid transit board to the construction of any other railway over, along or under any portion of any of the streets occupied by it whenever such new railway would not actually interfere with this company's structures. Furthermore, the city reserved the right to require a readjustment or relocation of those portions of the company's tunnels and terminal stations under certain streets, but this right was to be exercised only when some rapid transit railroad or other municipal use of such streets was of materially greater importance than the cost and inconvenience incident to such readjustment. Any such alteration was to be done, however, at the expense of the city, and the company was to be indemnified against all loss resulting therefrom, including the loss from any suspension or delay of traffic. The company was given the right to mortgage, assign or transfer its franchise on condition that every assignee or transferee other than a mortgagee, but including any purchaser under foreclosure, should be a corporation subject to the laws of the state of New York and should, upon accepting the assignment or transfer, assume to perform all the obligations of the company.

The original franchise for the upper tunnels had been granted to the New York and Jersey Railroad Company by certificate dated July 10, 1902.[1] This grant was for a tunnel railroad from the state boundary line, under the Hudson river and the dock and bulkhead property to Morton street, and thence running under Morton street, Greenwich street and Christopher street to a terminal in the block bounded by Christopher, West Tenth, Greenwich and Hudson streets. The terms and conditions of this franchise were substantially the same as those of the franchise for the lower tunnels already described.

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Subsequent to the granting of the franchises for the lower and upper tunnels, the two companies were consolidated in 1906 with the New Jersey company holding the franchises for the portions of the tunnel railroad system located in that state. The consolidated company took the name of the Hudson and Manhattan Railroad Company and was incorporated in both New York and New Jersey. Subsequently, the company changed its plan by abandoning its Thirty-third street terminal and applying to the public service commission, successor of the rapid transit board, for an extension of its route northerly under Sixth avenue and easterly under Forty-second street to the Grand Central station. The franchise extension sought was granted by the commission by a certificate dated May 4, 1909. In this certificate the commission reserved the right to purchase this extension at any time subsequent to January 1, 1935, or subsequent to any prior date when the city's option under the preceding franchise extension would become effective. It was stipulated

that no assignment, transfer or mortgage covering this extension franchise, should be valid until it had been approved by the public service commission. The grade of the extension at different points in Sixth avenue and Forty-second street was fixed by the franchise so as to interfere as little as possible with the construction of future subways laid out by the rapid transit authorities of the city.

450. Provisions for subways in the Chicago traction ordinances.—Chicago has maintained for a great many years certain tunnels under the Chicago river. The first definite step taken toward the construction of a system of passenger subways to relieve surface traffic in the heart of the city was the inclusion of certain provisions relating to subways in the traction ordinances of 1907. Under these ordinances, the city reserved the power to require the Chicago City Railway Company and the Chicago Railways Company to join with it in defraying the cost of construction of a system of subways for the joint use of these companies as downtown terminals of their street railway systems and for the use of the city and its licensees. It was agreed that the title to the subways should be in the city, but that if the companies joined in defraying the cost of construction, the system of subways should not be used for street railway purposes during the life of the franchises of these companies except by their street railway systems. The amount which the companies could be required at first to contribute toward subway construction was limited, however, to $5,000,000, exclusive of the cost of reconstructing the existing tunnels under the Chicago river, or of converting them into a part of the subway system. Before the companies could be required to join in defraying the cost of the construction of the subways, the city was to authorize such construction by an ordinance prescribing the location, character and extent of the system and the plans and specifications therefor. This ordinance was to specify the portions of the system to be devoted to the use of the companies and to the use of the city and its licensees, and was to regulate the manner of such uses and to specify the share of the cost to be borne by the companies and the extent of the user to which each company would be entitled in the part of the system devoted to street railway purposes; and the companies could not be required to contribute to the cost of

subways until the board of supervising engineers, appointed under the terms of the traction ordinances as already explained in an earlier chapter, had approved the location, character and extent of the subway system and the plans and specifications for its construction. Subject to the same conditions, the companies might be required by ordinance after the completion of the original subway system and after the expiration of five years from the time of the acceptance of the traction ordinances, to join with the city in defraying the cost of extensions and additions to the subways. Under the traction ordinances, the companies expressly admitted the city's right to construct subways under any or all of the streets in which the companies had tracks. It was also stipulated that nothing in these ordinances should be construed as giving the city power to require the company, in case a subway system was constructed and their railway tracks were placed in it, to cease operation during the term of the franchises on the surface of the streets occupied by the subways so long as the city should permit the construction or operation of any street railways on the surface of such streets. It was also stipulated that in case the capacity of the portion of the subway system devoted to street railway purposes should at any time be greater than necessarily or properly required for the use of the companies which had contributed to the cost of such subway, the city might require any other company, operating elevated railways, to use the subway system or any part of it to the extent of such surplus capacity, on paying a reasonable rental for such use, to be apportioned between the parties originally contributing to the cost of construction according to the amounts of such contributions. The city reserved the right to use the subways for a municipal elevated railway to the same extent that it might authorize or require their use by an elevated railway company, and upon the same terms.

Since the adoption of the traction ordinances in 1907, the street railway companies have been busy with the rehabilitation of their surface lines. The city has meanwhile been investigating the subway question, and within a few years Chicago will doubtless join New York and Boston in the provision of these most expensive and, for a great congested urban center, most necessary links in local transit facilities.

451. A franchise for telephone and freight tunnels combined – Chicago. —By an ordinance passed by the city council of Chicago, February 20, 1899, authority was given to the Illinois Telephone and Telegraph Company, its assigns and lessees, "to construct, maintain, repair and operate, in the streets, avenues, alleys and tunnels, and other public places in the city of Chicago and under the Chicago River and its several branches for and during the term of thirty (30) years from the passage of this ordinance, a line or lines of conduits and wires, or other electrical conductors, together with all necessary feeders and service wires, or other electrical conductors, to be used for the transmission of sound, signals and intelligence, by means of electricity or otherwise."[1]

This franchise was ostensibly a telephone grant, but a few years later, the city authorities awoke to the fact that the company had constructed, deep down under the streets, many miles of tunnels designed for freight transportation. Accordingly, on July 15, 1903, the city council passed another ordinance granting the same company, its successors and assigns, the right "to construct, maintain, repair and operate in and through tunnels which had been constructed under the terms of an ordinance of February 20, 1899, or which may hereafter be constructed under this ordinance or under the ordinance of Februaray 20, 1899, for and during the term of said ordinance of February 20, 1899, not only wires and electrical conductors as provided in said last mentioned ordinance, but also any appliance or apparatus for the transmission and transportation of newspapers, mail matter, packages, parcels or merchandise." It was stipulated that at the expiration of the original franchise, that is to say, on February 19, 1929, "all tunnels and conduits heretofore constructed and all tunnels hereafter constructed under said ordinances, shall without the payment of any consideration, become and be the absolute property of the City of Chicago, free from liens and incumbrances." This ordinance was amended, however, five days later and before its acceptance, so as to read that the tunnels should become the property of the city "without the payment of any *further consideration in addition to that contained in the grant herein made.*"

[1] This ordinance and its amendments passed in 1903 have been published as a separate pamphlet by the Committee on Gas, Oil and Electricity, of the Chicago City Council, November, 1903.

It was further stipulated that the company's tunnels or conduits should conform to certain requirements as to size and location.

"Trunk or main line tunnels," said the ordinance, "shall not be more than twelve feet nine inches in width and fourteen feet in height; the small tunnels shall not be more than six feet in width and seven feet six inches in height. The highest portion or top of the crown of any such tunnels or conduits shall be located at a depth of not less than nineteen feet below city datum."

It was provided that trunk line tunnels might be constructed on certain specified streets in the central business district of the city, and that outside of this district small tunnels and also trunk line tunnels could be constructed by the company as required by its business, provided that the trunk line tunnels should not be located closer than one-half mile apart, except as to diagonal or intersecting lines.

Before receiving any permit for the construction of tunnels, the company was to file plans with the commissioner of public works showing the location and character of its proposed tunnels, and the time within which the construction work was to be done. It was specifically provided that permits for trunk line tunnels in streets not mentioned by name in the company's franchises, should be issued only on the approval of the mayor or the city council. It was also expressly provided that no large or trunk tunnels should be constructed after the expiration of ten years from the date of this ordinance, July 15, 1903. The company was required upon order of the mayor or city council to lower all of its tunnels or conduits already constructed so that the crown of the tunnel in all cases would not be less than nineteen feet below the city datum. The city also reserved the right to compel tunnels, conduits or manholes constructed under this company's franchises, to be lowered, altered or removed whenever necessary for the construction of water tunnels or subways to be used in whole or in part for street railway purposes. The company was required to provide the city with free space in all its tunnels or conduits for the use of the city telegraph, electric light and telephone wires.

The construction and use of the tunnels and conduits and all appliances and apparatus connected with them for the transaction of the company's business were to be subject to

the reasonable rules and regulations of the city departments, and by an amendment of July 20, 1903, "to such reasonable requirements as may from time to time be made by the City Council with reference to said Company." It was provided that "all the work contemplated by this ordinance, including the thickness of tunnel walls and bottom, the composition and method of mixing concrete used and the method of construction, and place of location in the streets," should be done subject to the approval of the commissioner of public works and under his supervision. This official was given authority to stop the work whenever the method of construction or the material used did not meet with his approval, or whenever the private property or the underground work of the city was being endangered by the work.

The company agreed by the acceptance of this ordinance of July 15, 1903, to furnish its patrons in the various classes of service provided for in the original and the new franchise "the best possible service and to maintain its entire equipment in all of said classes of service at the highest and best practicable standard known to modern invention and mechanical skill, as developed from time to time during the term of this grant, and to make its patrons no extra charge for any improvements hereafter in its service or equipment." Permission was granted to the company, whenever required by its business, "to connect up" any of its tunnels underneath the streets with the abutting lots, the owners or lessees of the lots consenting to such connections. The company was also authorized to connect up the tunnels with its branch offices or delivery stations "by proper passageways or connecting tunnels, on the same level as the tunnel with which they connect." The company was authorized to "lease, but not beyond the term of this grant, subject to the rights for space reserved to the City," space in its tunnels "only to such persons or corporations as may hereafter be authorized by the city to conduct or carry on business in or through conduits or tunnels," but in all cases a certified copy of any such lease was to be filed with the city comptroller. It was expressly stipulated that nothing contained in this ordinance should authorize the company "to maintain or operate cars or vehicles of any kind in its said tunnels for the conveyance or transportation of passengers, nor shall it have the right

or authority to lease space in its said tunnels to any person, firm or corporation, to carry passengers in any manner." The city reserved the right to make reasonable regulations for charges and rates for all portions of the company's business except the telephone service. The city reserved the right after twenty years to terminate the company's franchise after giving twelve months' previous written notice of the city's intention to take over so much of the company's property as was suitable to the purposes of this franchise and used in connection with it. This property was to include "the tunnels themselves, and all appurtenances, equipment and fixtures except the wires, equipment and fixtures necessary to the carrying on of the telephone business." In case the city terminated the tunnel franchise and took over the tunnels and fixtures, the company was to have the right to utilize the tunnels during the full term of the original ordinance "to such extent as may be necessary to the carrying on of the telephone business." The company was to pay, however, a reasonable rental for the use of the tunnels. If the city decided to terminate the grant, it would be required to pay for the property "in cash the then cost of the duplication, less depreciation, of said tunnels, appliances and property, with five per cent addition thereon as compensation for the compulsory sale," but there was to be no allowance for earning power or franchise values. The appraisal of the company's property was to be conducted by three disinterested persons, one appointed by each party, and the third by the first two, but in case either party neglected to appoint an appraiser, or in case the first two appointees failed for a period of thirty days to agree on a third, then either party upon giving ten days' written notice to the other could apply to the appellate court of the first district, of Illinois, or a majority of its judges, and any appraiser appointed by the court would have the same powers and duties as if appointed in the regular way. It was made the duty of the appraiser to determine "what tangible property, real and personal, in addition to the said tunnels, owned by the company and then used for the purposes of this grant, is reasonably required for its continued operation; and, in determining the fair cash value of said property, they shall not take into consideration its earning power or the value of any franchise or license, but shall allow

for the property, the then cost of duplication, less depreciation." At the expiration of the original franchise, the city would have the right to purchase at the appraised valuation, by giving two years' written notice in advance, any or all of the wires, equipments and fixtures necessary for carrying on any of the company's business. In case the city and the company could not agree on a price to be paid for this property, the matter was to be determined in the same way as provided in case of the city's purchasing the tunnels before the expiration of the franchise, with the exception that the five per cent addition as compensation for compulsory sale should not in this case be added to the appraised value.

If, at the expiration of the franchise, the city should not determine to operate the business established in the tunnels, and should not have elected to purchase the property and appliances of the company, and should decide to grant the use of the tunnels to any person or corporation, it was required to invite proposals for the use of the tunnels. In case the Illinois Telephone and Telegraph Company or its successors should make "a proposal of equal advantage to the city in every respect with the proposal of any other person, firm or corporation," then the use of the tunnels was to be given to this company upon terms and conditions to be fixed by ordinance. If, however, this company's proposal should not be of equal advantage to the city with the proposal of any other person or company, and the city determined to grant the use of the tunnels to the most favorable bidder, it was required to incorporate in the new franchise a provision compelling the grantee to purchase the tangible property of the old company, (exclusive of the tunnels and conduits which would then be the property of the city), reasonably required for the purposes of the franchise "at its fair cash valuation." The question as to whether the proposal of this company was of equal advantage with the proposal of any other company was to be decided by the city council.

The company was required to make a detailed annual report to the city council according to forms to be prescribed by the city comptroller "giving full information on all such matters as may be from time to time specified by the City Council." For the purpose of verifying this report and of informing the officials of the city in regard to all the com-

pany's financial operations, the books of the company were to be subject to examination at all times during business hours by the city comptroller or his representative. The company was required to pay into the city treasury during the first ten years after the passage of the ordinance of July 15, 1903, five per cent of its gross earnings from the transportation of mails, newspapers, packages and merchandise; for the second ten years, eight per cent; and for the remainder of the franchise period, twelve per cent. On all gross receipts derived from the rental of space in the company's tunnels or conduits, the city was to receive twenty per cent. It was stipulated that "in so far as the capacity of the tunnels will permit," the company should allow any person, firm or corporation properly authorized by the city, to use the tunnels as far as necessary "upon the same terms and conditions that space in such tunnels shall be leased by said company to other persons, firms or corporations." The company was required, within two years after the going into effect of this ordinance, to install and operate in the tunnels so far as they were then completed, "a system, by car or other proper and appropriate appliance, by which said company shall convey and transport such packages, mail matter, newspapers or merchandise, as may from time to time be offered to it for such conveyance and transportation by any person or persons desiring the same." If the company failed to construct its tunnels, as authorized, in the central business district, and to operate through them a system for the transportation and delivery of packages, mail matter, newspapers and merchandise within five years from the date when the ordinance went into effect, it was to forfeit and pay to the city of Chicago $200,000, and in case it failed to pay this sum within the time designated, it was to forfeit all its rights acquired under this franchise, "together with its plant and equipment for transportation purposes, then installed." In case the company failed to construct or ceased to operate fifty miles of tunnels within ten years, it was to forfeit its rights under the franchise of July 15, 1903. The ordinance was to be accepted in writing within four months after its passage, but was not to go into force until the company had filed a bond in the sum of $100,000 to indemnify the city against any possible damages resulting from the construction and operation of the

tunnels, and also to guarantee the faithful performance and observance of the terms of the franchise.

This ordinance was amended February 1, 1909, and again June 28, 1909.[1] The first of these amendments extended the time within which the company was required to install a telephone system adequate for the service of 20,000 subscribers to October 8, 1909, and also provided that if the system should not be in operation as required, the company's franchise and property should be forfeited to the city, *or to any licensee of the city designated for that purpose.* In any such case the company was to furnish the city or its licensee, without charge, space in the tunnels and conduits sufficient to reasonably accommodate an equipment for the service of 20,000 telephone subscribers. It was also provided that the company should file an annual report on the 15th day of March setting forth in reasonable detail, according to forms to be prescribed by the city comptroller, the character and amount of the company's business and the amount of its receipts and expenditures. Full information was to be given on such other matters as might from time to time be specified by the city council. The right to examine the original books, vouchers and records of the receipts and expenditures of the company, or relating to its business or affairs, for the purpose of testing the accuracy of its report and of ascertaining the rights of the city was reserved to the city comptroller or accountants designated by him. The company was required to maintain its principal office in Chicago, and keep there a complete set of records and not remove any of its books, except bond registry and stock transfer books, beyond the limits of the city. It was stipulated that if the company should sell or lease its telephone system and telephone rights under the terms of its franchises, then a compliance with this requirement by the company's assignee or lessee would be regarded as sufficient.

In the amendment of June 28, 1909, there was a further clause to the effect that no sale, lease or transfer of the company's telephone system or telephone rights apart from its plant and equipment for transportation or other purposes should be made prior to December 1, 1910, except with the

[1] Journal of the Proceedings of the City Council, February 1, 1909, p. 2602, and June 28, 1909, p. 911.

approval and permission of the city council. It was stipulated, however, that this restriction should not be construed as preventing the sale, lease or transfer of the company's telephone system and rights by themselves at any time after December 1, 1910. In case the company or its successors should violate the provisions of this clause, the ordinance was to become null and void, and the telephone plant be forfeited to the city.

These franchises, originally granted to the Illinois Telephone and Telegraph Company, are now held by the Illinois Tunnel Company as assignee.

452. The Market Street Subway—Philadelphia.—The legislation under which the Market Street Elevated Railway Company was incorporated has already been described in the preceding chapter. The Market Street Subway has been constructed by this company as part of a route extending entirely across the city through Market street. The subway portion of this route extends from the Delaware to the Schuylkill, with two tracks east of the City Hall and four tracks west of that point. Where there are four tracks, the two outside ones are used for ordinary street cars coming from West Philadelphia and looping around the City Hall at Broad street.

The Philadelphia subway was constructed under an ordinance passed April 9, 1902, and a supplementary ordinance passed December 24, 1902. By the earlier of these ordinances, the Market Street Passenger Elevated Railway Company was authorized to build an underground or subway railroad beginning at Delaware avenue and Market street, extending thence under Market street, passing around "the Public Buildings" and continuing on Market street to the county line or going as far along that route as the company desired, with the right to come out upon the surface on Market street west of Twenty-second street, or on private property to connect with the tracks of any other passenger railway company. The subway, like the Market Street Elevated Railway, was to be operated by electricity or any other motive power except steam, as the company's board of directors might from time to time determine. The company was required to construct in the subway at its own expense and furnish to the city all necessary tubes or conduits for carrying the city's telegraph, telephone and fire alarm wires.

Stations were to be constructed not more than one-half mile apart and the company was authorized to use so much of the highway adjacent to the stations as might be necessary for constructing safe and convenient approaches to them. It was stipulated that the tunnel or subway authorized by this ordinance should have its crown or top constructed in such a way as thoroughly to support the surface of the street and secure it against subsidence. In the construction of the tunnel the street surface was to be interfered with as little as possible. The railway was to be built with the "most improved methods of deadening sound" and was to be located as nearly as possible in the center of the street. The company was required to readjust at its own expense all sewers, gas and water pipes and other municipal structures disturbed by it in the building of the subway. If at any time the grade of the street should be revised by ordinance, the company would have to conform its tunnel to the changed grade.

The rate of fare on the entire line was limited to five cents. Work was to be begun within one year and finished within three years thereafter. If work was not begun in good faith and completed within the time specified, the franchise was to be null and void, unless the delay had been caused by strikes, floods, fire or other matters over which the company had no control. Plans of the railway, the location, structure and character of the tunnel and all places of approaches, stations, sidings, switches, etc., within street lines, were to be submitted to the director of public works for his approval. The company was required to give a bond in the sum of $50,000 to guarantee that it would live up to the terms of its franchise. The company was also required to enter into a contract with the city to that effect. The sum of $50 was to be paid into the city treasury by the company to cover the cost of printing the ordinance.

By the supplementary ordinance of December 24, 1902, the company was authorized to construct a loop through Broad street, Walnut street and other streets, and a branch through Front street and Arch street to connect with the tracks or elevated structure of the Frankford Elevated Passenger Railway Company. The company was also required to enter into a contract with the city to build a new bridge of sufficient width to carry its tracks over the Schuylkill river within the

lines of Market street as the street was to be widened. Under this contract the company would be required to keep the bridge "in perpetual good repair," and in turn would have "the perpetual exclusive use thereof" in order to carry the tracks connecting the subway with the elevated road to be built in Market street west of the Schuylkill. For this ordinance the company also had to pay $50 to cover printing bills.

Under the street railway contract of July 1, 1907, the Philadelphia Rapid Transit Company, as owner of all the capital stock of the Market Street Elevated Passenger Railway Company, surrendered to the city the right to construct a subway in Broad street.

453. A two-level subway system provided for in the Cleveland Underground Rapid Transit franchises.—As a part of the transit policy of Tom L. Johnson, then mayor of Cleveland, the city council on June 7, 1909, passed an ordinance granting a seventy-five year franchise to the Cleveland Underground Rapid Transit Railroad Company. Under the referendum law in force in Ohio, petitions were filed requiring that this grant be submitted to the electors for ratification. The result was that a majority of all the votes cast on the subject were against the franchise. But the grantees claimed, under the law, that blank ballots upon which the voters had indicated no preference one way or the other, should be counted in the affirmative. If this contention was correct, the franchise would be ratified. Pending the decision of the legal question involved, the city council, subsequent to the fall election of 1909 and prior to the going out of the Johnson administration, repassed the subway grant in amended form, the grants for the upper and for the lower levels being separated and two ordinances being passed instead of one. The publication of these ordinances was enjoined, but the company filed its acceptance of them. Subsequent to the incoming of the new administration, January 1, 1910, the new ordinances were repealed. There was doubt, however, as to the validity of this repeal, and to make sure that the people should have another chance to vote on the question before the company's rights could be perfected, a remonstrance was filed sufficient to compel the submission of the new ordinances to the electors at the election in November, 1910, if, in the meantime, the legal status of the company's claims had been determined so

as to render this course possible or necessary. As a matter of fact, no final judicial ruling was secured, but the ordinances were submitted and were ratified by substantial majorities.

The Cleveland subway franchises differ from all the others which we have thus far described in that they provide for a double system of subways on the so-called upper and lower levels. The ordinances passed December 6, 1909, recited that the growth of the city and its suburbs made it desirable to provide and facilitate rapid transit to outlying sections; that the interurban railroad traffic was becoming an increasing burden on the street railway tracks, hindering and impeding local traffic and requiring the maintenance of surface terminals near the center of the city, which tended to blockade the streets; and that the construction of subways would promote the future development of the city. Accordingly, the company was authorized to construct and maintain double track subways and to operate by electricity in such subways double track underground railroads with suitable stations, terminals and way stations. The subways were to be constructed so as not to impair the stability of the streets and public grounds or to prevent the use, except temporarily, of any sewers, water, gas or other pipes, wires and conduits used in such streets or public places. The company was also authorized to construct and operate an elevated railroad where necessary to connect its low level subway in East Ninth street with the New York, Chicago and St. Louis Railroad right of way. This elevated structure was to leave a clearance of fourteen feet six inches between its lowest point and the surface of the roadway underneath, and was to be so constructed as not to prevent the ordinary use of the streets and grounds by pedestrians, vehicles, street cars or otherwise, except temporarily during construction. Nine separate subway routes were granted, five of them branching out in various directions from central terminals under the public square, and the others furnishing cross and connecting lines. On some of these routes the company was authorized to have four tracks. Four of the routes were designated as "low level routes." The company was given the right to erect and maintain lines of poles, wires, conduits and other appliances necessary to connect its power houses with its subway systems.

All poles erected by the company were to be of iron, and the wires were to be placed underground in streets where other electric wires were underground.

The rate of fare on either subway system was not to exceed five cents, and on the high level system free transfers were to be given at the public square and at four other intersecting points. It was also stipulated in the high level ordinance that "no more passengers shall be carried than can be seated." Subway stations were to be built entirely below the surface of the street, except the stairways, which were to be constructed at the curb-lines in locations to be approved by the city board of public service. Stairways were not to be more than four feet wide except with the special permission of the city, and suitable coverings not more than ten feet high from the sidewalk, not wider than four feet six inches, and not longer than twelve feet, were to be constructed "of metal and glass of substantial and ornamental design" over each stairway. Ventilating stations with suitable mechanical devices for exhausting air from the subway or forcing air into it, were authorized. The high level subways were to be located at the most convenient space within the width of the streets and were to provide a clear space of not more than ten feet wide and fifteen feet deep for each track. In low level subways, a clear space sufficient to admit ordinary passenger cars was authorized. Wherever the subway was of a greater depth than the foundation of any building abutting the street, the company was to be obliged to safeguard and secure such foundation at its own expense. Provision for this purpose was to be shown on the plans to be filed with the board of public service before the commencement of construction. The company was authorized at its own cost to move or relocate sewers, water pipes, gas mains, hydrants, conduits and poles or any other obstruction encountered in the course of construction of the subway, according to plans for relocation or change filed with and approved by the board of public service. The company was required to place in its subways any pipes, lines or conduits to be used by the city for any of its services, provided that such placing should not interfere with the company's use of the subways and provided further that the city should pay the cost of constructing such pipes, lines and conduits. The use of the streets and public grounds was

to be interfered with as little as possible during construction. Openings in the streets were to be made on permits issued by the city, the company being required in each case to deposit the sum necessary to pay all inspection charges. The company was required at all times during the continuance of the franchise or any renewal of it, to keep true and accurate accounts of all moneys received and disbursed, and of liabilities incurred in the maintenance and operation of its property. It was also to keep complete statistical accounts of its earnings and operations. The accounts were to be kept in the manner prescribed by the American Street and Interurban Railway Accountants' Association, or as might be provided by law. All these accounts were to be kept at the company's office open to inspection at reasonable times, and the company was required to make monthly reports of its car mileage and earnings to the city, and make such other statements and reports as the city might from time to time direct. It was stipulated that the city should "at all times have access to and full authority to inspect, examine, audit and verify all accounts, vouchers, documents, books and property of the company relating to the receipt and expenditure of money and the business done by the company in the operation of its railway."

Not more than 1500 feet of street length was to be opened at any one place, and at street crossings suitable temporary bridges were to be provided by the company. Before the beginning of construction under either ordinance, the company was to file with the city a $100,000 bond to protect the city and the owners of abutting property from damages accruing on account of the construction work of the company. This bond might be increased by the city at any time and it was to remain in force while any construction work begun was incomplete and for two years afterward. All excavated waste material was to be removed from the street as the excavations went on. Without the consent of the board of public service, no tree more than ten inches in diameter two feet above the ground could be removed by the company. Construction work on the high level subways was to begin within eighteen months from the passage of the ordinance, and at least one double track line from the public square to the outskirts of the city was to be in operation within four

years. Thereafter at least five miles of double track were to be placed in operation in the next succeeding period of three years, and thereafter at least five miles of double track were to be completed within every succeeding period of two years. Construction work on the low level routes was to be begun within two years from the passage of the ordinance, and at least one of these routes was to be completed within four years, and the others within three years thereafter. In case the company failed to construct within the time indicated, its rights on portions of routes not completed were to be subject to forfeiture by the city, but the right to enlarge existing subways or to construct additional ones to put in two additional tracks, after the completion of two tracks on any route or portion of a route, was to continue throughout the life of the grant. Failure to operate any line of the subways for a period of twelve consecutive months after its construction, except for legal obstacles over which the company had no control, was to be deemed an abandonment of such line, and that portion of the subway was to revert to the city upon the passage of a resolution by the city council declaring such abandonment. Before commencing work on its low level system, the company was to have effected arrangements for the use of its subway and elevated tracks in connection with tracks on or adjacent to the New York, Chicago and St. Louis Railroad right of way for rapid transit to the eastern and western portions of the city. Provision was to be made for the transmission of interurban cars over this route, and the arrangement for the use of the tracks on the railroad right of way was to be assured for the entire period of the subway franchise. The five-cent fare was to extend to all transit within the city limits on cars which used the low level subways as a part of their route.

The company was required to place on all of its lines "cars of modern design equipped and furnished with such improvements and appliances as shall be deemed by the city necessary and proper for the safety and comfort of the passengers and the public." Cars were to be run in such numbers and at such intervals of time and under such rules and regulations as the city might require. The city reserved to itself the control of the schedules in the high level subways, and the right to require the company to receive and transmit

in them to terminals designated by the city from time to time, all interurban cars tendered to the company for such transmission, the only condition being that the cars should be of a size, material and form and equipped with appliances to permit their transmission through the subway, without requiring the company to modify its appliances to receive them, and without interfering with the use of the subway for other purposes provided in the high level ordinance. The company was required to supply in all its subways such improvements and appliances as the city might deem necessary and proper for the safety and comfort of the passengers and the public. As in all similar cases, the company was required to indemnify the city against claims for personal injuries arising from the construction, operation or maintenance of the structures and railways authorized by these ordinances.

The company granted to the city the right, which the latter reserved to itself, "whenever it shall have the legal right so to do," to purchase and take over after twelve months' written notice either the high level or the low level subway system in its entirety. For the high level routes the purchase price covering the value of the subway, terminal spaces and stations exclusive of tracks and appliances, was to be $350,000 per mile of single track in the subway, less $4,666 a year for each year that had elapsed between the date when the ordinance took effect and the date of purchase. Each station was to be measured as three times the length of the single track multiplied by as many tracks as were served by the station. All other property of the company, including its tracks and mechanical and electrical contrivances, located in the subways or stations, and its power houses, shops, yards, office buildings, wires, feeder-lines, real estate, rolling stock and other property of every kind necessary or used in the operation of the subways, was to be valued at the cost of reproduction less a reasonable amount for depreciation. To the aggregate value of the subway and other property as so ascertained, there was to be added a bonus of ten per cent to make the purchase price. For the low level subways, the price was to be determined in the same manner, except that the tunnel was to be valued at $850,000 per mile of single track with no apparent allowance for stations and terminal spaces and no deductions on account of the passage of

time. The city also reserved the right to designate a licensee with authority to acquire the company's properties on the same terms and at the same prices as fixed for acquisition by the city. In case of disagreement between the grantee on the one hand and the city or its licensee on the other, the value of the property, the value of which was not fixed in the ordinance, was to be referred to a board of arbitrators. No franchises or privileges granted by the city were to be estimated or paid for. Separate itemized schedules with values were to be made under the following titles: (1) land, (2) power plant, including land, buildings and machinery, (3) all other buildings, (4) tracks, including poles, wires and appurtenances, (5) rolling stock, (6) miscellaneous. The city and the company were each to name an arbitrator and the two so named were to agree upon a third. If, however, they could not agree within ten days, or if the company failed to appoint an arbitrator, the person who was at the time United States district judge for the district in which the city of Cleveland was located, or in case he was disqualified or declined to act, then any judge of the court of appeals of the district of which Cleveland was a part, might name the additional arbitrator or arbitrators.

The franchises were to continue until January 1, 1960, unless the subways were sooner acquired by the city or its licensee. In case, however, the city had not taken over the property prior to the date mentioned, then the company would have the option of an extension of its franchises for an additional period of twenty-five years, that is to say, until January 1, 1985. On the latter date, the high level subways exclusive of appliances and property that could be removed without injury to the subways, whether in the possession of the grantee or its successor or in the possession of the city's licensee, were to become the property of the city without payment. It was specified in the ordinances that the company might exercise the rights granted on any street or part of a street, or by any one provision of the ordinances, even though its right over any other street or under any provision of the ordinances had been disputed, enjoined or held to be invalid. It was declared to be the intent of the council that the franchises might be exercised and held to be valid as to any

part or provision notwithstanding their invalidity as to any other.

It should be noted that while the low level subways are to be constructed so as to furnish clear space "sufficient to admit ordinary passenger cars," there is nothing in the ordinances to require the high level subways to be of any particular dimensions within the maximum permitted. The purchase price of the high level tunnels is fixed at so much per mile of track without reference to their size.

the railway may pass, to impose terms and conditions without limit upon the operations of the company is highly illogical. Whatever may be said of the strictly local character of the great mass of ordinary city streets and back country roads, it cannot be successfully claimed that the main roads and thoroughfares along which interurban street railways are necessarily built should be subject to exclusive and unlimited local control. An entire county, or perhaps an entire commonwealth, may have a vital interest in the construction and operation of an interurban line. It is the function of interurban railways to provide cheap, convenient and comfortable facilities for travel through the country and between cities, and to provide cheap and convenient means for collecting express matter and light freight, principally farm produce, and conveying it quickly to its destination in the city. An interurban railway franchise granted by a city at the end of the line is really a terminal franchise. The city's strategic position enables it to impose terms and conditions affecting the construction and operation of the railway outside as well as inside the city limits. Undoubtedly there should be some state authority to approve or revise the terms of a city franchise to an interurban company in so far as those terms affect the company's operation outside of the city limits. The mere fact that the city is big ought not to enable it to exploit interurban railways solely for its own benefit. For the most part, however, no adequate supervising state authority has been provided and the interurban companies are left to fight out the terms and conditions of their franchises, with the various city councils, village boards and highway commissioners exercising authority over the streets along different portions of the railway routes.

The most important special features of a city franchise for an interurban railway have to do with the construction of the entire line within a limited time; the frequency of car service to other points; the character of the cars used; the proper regulation of the freight and express business of the railway, including the switching of cars for factories; the requirement of loop operation in the center of the city with or without passenger and freight stations on private property; the compensation of the local street railway company for the use of its tracks; the compensation of the city for the fran-

chise; the character of the local service to be rendered by the interurban company and the rates of fare and transfer privileges within the city limits; the duration of the franchise; and, in case the railway is to be constructed by the company within the city limits, the joint use of its tracks and depot facilities by other companies and the city's right to purchase the tracks subject to the company's right to continue to use them on paying rental.

In order to avoid unnecessary repetition of provisions already gone over in the chapters on street railway franchises, I shall take up in the succeeding sections several special features of interurban franchises and discuss them topically, with copious illustrations from the grants in force in particular cities, leaving the interurban franchises of only five cities to be described as separate units and in some detail in the concluding sections of this chapter.

456. Operation of interurban cars within city limits by local street railway company; use of local company's tracks.— In cities where the local street railways are owned and operated under franchises and laws that do not reserve to the municipal authorities the right to compel the local companies to admit other companies to the joint use of their tracks, interurban railways are frequently not in a position to get franchises into the heart of town over new routes, and are therefore compelled to stop at the city limits or else treat with the local companies for terminal privileges. Indeed, in some cities the local companies have the right to let other companies use their tracks without such other companies having to get the consent of the local authorities at all. In other places, the need of such consent is in doubt. In such cases, the local companies, either with or without the consent of the municipal authorities, may agree to receive the interurban cars at the city limits and operate them to a down-town terminal and back to the city limits, there to be redelivered to the interurban companies. In such cases local crews have possession of the cars within the city and collect local fares from the passengers. What portion of the sums so collected shall be turned over to the outside companies is, of course, a matter of agreement between the companies concerned. As already noted in the descriptions of street railway franchises in preceding chapters, a city, instead of requiring a local

company to permit interurban companies to use its tracks, sometimes provides that the interurban cars shall be received at the city limits by the local company and be delivered there again. Wherever this is a franchise requirement, the terms upon which this service shall be rendered are either fixed by the franchise ordinance or are made subject to agreement, arbitration or future determination by the city authorities.

Where the city has reserved the right in its street railway grants to authorize the joint use of tracks, the terms and conditions of such joint use are contained in the street railway rather than in the subsequent interurban franchises. Examples of this state of affairs may be found in Indianapolis, Dallas and Kalamazoo, Michigan. Cases where interurban franchises bind the grantees to admit other interurban companies, coming in later, to a share in their track and terminal facilities will be discussed in a subsequent section.

457. Local service of interurban cars; fares and tranfers.— In most cases interurban cars using regular street railway tracks are required to stop at any street crossing to let passengers on or off, the same as ordinary street cars. In some cases, however, "limited" cars are not required to stop except at certain points. A franchise granted two or three years ago by the city of Kalamazoo to the Kalamazoo, Gull Lake and Northern Railroad Company[1] provided that "all cars, both incoming and outgoing, shall stop at such street crossings or places to take on and let off through or local passengers as may be designated by the City Council." This ordinance also provided that within the city limits the company should charge not more than a five-cent fare for adults and a three-cent fare for children between six and twelve years of age, younger children being carried free, if accompanied by parent or guardian.[2] It was stipulated, however, that "when a seat in a drawing-room, dining or other special car" was furnished by the company, an extra charge might be made. The company was required to exchange free transfers with "such street railways as are required, or will agree to give transfers to the said railway constructed under this franchise, whether required by its franchise or not." Transfers were to be "for immediate use on the next car within the city of

[1] Ordinance No. 228, section 11. [2] *Ibid.*, section 10.

Kalamazoo." No charge was to be made for hand baggage in the possession of passengers.

Substantially the same provision in regard to transfers is found in a franchise granted by the city of Memphis to the Clarksdale, Covington and Collierville Interurban Company, September 20, 1907.[1] Under this ordinance the cash fare was to be five cents, but children under five years of age were to ride free. There was no half-fare provision, except for public school children under the age of eighteen, who were to be entitled to buy half-fare tickets, a quarter's worth at a time, available for use between eight in the morning and six at night "in actual passage to and from school." Moreover, whenever the legislative council thought that Memphis was entitled to a cheaper fare for general use, it would have the right to require the company to sell tickets at the rate of six for twenty-five cents.

An ordinance of the city of Dallas, approved September 12, 1906, granting an interurban franchise to J. Mercer Carter, who later transferred his rights to the Dallas Interurban Electric Railway Company, specifically provided that in connection with the interurban service there should be maintained "an efficient and adequate local service within the city limits."[2] In the operation and maintenance of the local street car service, the railway was to be equipped with new cars of approved type, all such cars were to be comfortably heated during the winter months, and no open cars were to be used from November 13 to March 31, except by authority of the city council. A five-cent fare for adults was authorized, but children between five and twelve years of age and students not more than seventeen years old "in actual attendance upon public or private schools" were to be carried at half-fare.

By an ordinance passed May 19, 1892, the city of Newport, Kentucky, authorized the South Covington and Cincinnati Street Railway Company to use certain streets of the city for the construction of a through line to Cincinnati, with the provision that the company should not charge more than five cents for a continuous ride between points within

[1] Hughey's Digest of the Laws, Ordinances and Contracts of the City of Memphis, *already cited*, p. 849.
[2] Franchise Ordinances of the City of Dallas, *already cited*, p. 226.

the limits of Newport or from any point in Newport to any point reached by the company's cars in Cincinnati, Covington or Dayton, Kentucky.[1]

A South Bend franchise granted in September, 1903, to the Chicago and Indiana Air Line Company provided for a local five-cent cash fare, twenty-five rides for a dollar, and an exchange of transfers with other street railway companies operating in the city.[2] It was provided that "all transfers shall be redeemed by the issuing street railway company by paying to the company presenting them for payment an amount equal to 40 per cent of the original cost of said fare." These transfer requirements were not to hold good, however, except with companies who would accept the arrangement.

On April 6, 1907, the St. Louis Electric Terminal Railway Company secured a franchise from the city of St authorizing it to build a railway to connect with th urban systems of the Illinois Traction Company an other Illinois companies.[3] This grant provided for a fare for adults, with half-fa r children between twelve years of age, in St. nd between St. L Granite City, Illinois. I ided that no charge should be made for her freight, e passengers over the bridge Mississippi ri built by the St. Louis Elec Company a operated in connection with t for transp by means of any ferry operat on with t way pending the completion o

458. Special equipment and t of inter railways: weight of rails; devic electrol **character of cars**; speed; headwa onstr **outside the city limits required.**— Salt Lake and Suburban Railway C from Salt Lake City which required th equipped "with all necessary modern convenience and comfort of the passeng bules, airbrakes and fenders."[4] Cars we the company's railway at least once an hour

[1] Special Ordinances, Newp
[2] Revised Ordinances, 1905,
[3] Laws, Ordinances and Per
St. Louis, p. 860.
[4] Book of Ordinances, Salt Lake

six in the morning and eleven at night. The speed of cars was limited to twelve miles an hour.

The Dallas interurban franchise of September 12, 1906, to which reference was made in the preceding section, required that on all paved streets standard grooved girder rails weighing not less than 91 pounds to the yard should be used. Such rails were to be "laid in concrete foundations with metallic ties," and in laying the rails "such means and instrumentalities and appliances" were to be used as would "best protect the city and public and other private concerns against the effects of electrolysis." These appliances were to be changed whenever the city council deemed it necessary for the purpose of guarding against electrolysis, "or excessive noise."

The South Bend franchise of the Chicago and Indiana Air Line Company, also mentioned in the preceding section, required the company, "by means of careful bonding or other approved and established means," to "provide against electrolysis of gas, water or other pipes laid underneath the surface of the streets, avenues, alleys or private rights of ". The franchise of the Kalamazoo, Gull Lake and ilroad Company was still more careful on this vided that if the city council of Kalamazoo he location of any pipes or other underground count of electrolysis caused by the railroad, ld foot the bill. Moreover, the company ake a full examination of the condition of electricity at least as often as once urnish a copy of the record of such council." Thirty days' previous uch examination was to be given representatives present at all on showed "any deterioration s or any injury to the water ot intended to convey cur- le good by the company at

led that at least one pas- the city every two hours night," "and run to Gull ek, or connect with cars

the limits of Newport or from any point in Newport to any point reached by the company's cars in Cincinnati, Covington or Dayton, Kentucky.[1]

A South Bend franchise granted in September, 1903, to the Chicago and Indiana Air Line Company provided for a local five-cent cash fare, twenty-five rides for a dollar, and an exchange of transfers with other street railway companies operating in the city.[2] It was provided that "all transfers shall be redeemed by the issuing street railway company by paying to the company presenting them for payment an amount equal to 40 per cent of the original cost of said fare." These transfer requirements were not to hold good, however, except with companies who would accept the arrangement.

On April 6, 1907, the St. Louis Electric Terminal Railway Company secured a franchise from the city of St. Louis authorizing it to build a railway to connect with the interurban systems of the Illinois Traction Company and certain other Illinois companies.[3] This grant provided for a five-cent fare for adults, with half-fare for children between five and twelve years of age, in St. Louis and between St. Louis and Granite City, Illinois. It also provided that no arbitrary charge should be made for hauling either freight, express or passengers over the bridge across the Mississippi river to be built by the St. Louis Electric Bridge Company and to be operated in connection with the railway, or for transportation by means of any ferry operated in connection with the railway pending the completion of the bridge.

458. Special equipment and through service of interurban railways: weight of rails; devices to prevent electrolysis; character of cars; speed; headway; amount of construction outside the city limits required.—On August 14, 1902, the Salt Lake and Suburban Railway Company got a franchise from Salt Lake City which required the company's cars to be equipped "with all necessary modern improvements for the convenience and comfort of the passengers, including vestibules, airbrakes and fenders."[4] Cars were to be run over the company's railway at least once an hour each way between

[1] Special Ordinances, Newport, *already cited*, p. 425.
[2] Revised Ordinances, 1905, *already cited*, p. 154.
[3] Laws, Ordinances and Permits pertaining to Public Service Corporations of St. Louis, p. 860.
[4] Book of Ordinances, Salt Lake City, *already cited*, p. 598.

six in the morning and eleven at night. The speed of cars was limited to twelve miles an hour.

The Dallas interurban franchise of September 12, 1906, to which reference was made in the preceding section, required that on all paved streets standard grooved girder rails weighing not less than 91 pounds to the yard should be used. Such rails were to be "laid in concrete foundations with metallic ties," and in laying the rails "such means and instrumentalities and appliances" were to be used as would "best protect the city and public and other private concerns against the effects of electrolysis." These appliances were to be changed whenever the city council deemed it necessary for the purpose of guarding against electrolysis, "or excessive noise."

The South Bend franchise of the Chicago and Indiana Air Line Company, also mentioned in the preceding section, required the company, "by means of careful bonding or other approved and established means," to "provide against electrolysis of gas, water or other pipes laid underneath the surface of the streets, avenues, alleys or private rights of way." The franchise of the Kalamazoo, Gull Lake and Northern Railroad Company was still more careful on this point. It provided that if the city council of Kalamazoo had to change the location of any pipes or other underground structures on account of electrolysis caused by the railroad, the company should foot the bill. Moreover, the company was required to "make a full examination of the condition of all of its conduits of electricity at least as often as once every six months, and furnish a copy of the record of such examination to the city council." Thirty days' previous notice of the time set for such examination was to be given and the council might have representatives present at all of the tests. If the examination showed "any deterioration in the conductivity of the returns or any injury to the water pipes or other metal structures not intended to convey currents," the defects were to be made good by the company at once.

This Kalamazoo franchise provided that at least one passenger car should enter and leave the city every two hours from six in the morning till ten at night, "and run to Gull Lake or Grand Rapids, or Battle Creek, or connect with cars

to any of said places." It was also provided that "not more than four freight cars, as distinguished from express cars," should enter the city between eight A. M. and eight P. M., except during the construction of the road.

The common council of South Bend reserved the right to adopt reasonable regulations governing the running time of both interurban and city cars, but might not require the company to run an interurban car over any line oftener than ten times between the hours of six A. M. and seven P. M. daily. St. Louis required the St. Louis Electric Terminal Railway Company to run cars at least every thirty minutes between six in the morning and midnight and once an hour during the rest of the twenty-four hours. This company was required to lay grooved rails weighing not less than 112 pounds to the yard, of a pattern or design to be approved by the city's Board of Public Improvements. The Newport franchise to which reference has been made prescribed a headway of not more than eight minutes for the cars to Cincinnati during the morning and evening rush hours and not more than fifteen minutes at other times up till midnight.

By the terms of each of three franchises granted by the city of Dallas to J. Mercer Carter, on September 12, 1906, one of which has already been mentioned, the grantee was required to have at least twenty miles of interurban railway entering Dallas built and in operation within one year from the commencement of construction, which was to be within six months from the acceptance of the franchises. On October 30, 1907, all three franchises were amended so as to extend the time for the commencement of construction to April 1, 1908, and so as to require the completion of sixty miles of interurban railway within and entering the city over one or all of the lines covered by the three original grants, within one year after the new date for commencing construction.

The Nashville and Gallatin Electric Railway received a franchise from the city of Nashville, July 14, 1902, which required that the entire length of the company's line from Nashville to the town of Gallatin should be equipped and operated with electric cars within two years from the acceptance of the grant, on pain of forfeiture.[1] Two years later, however, the company got an extension of time for three years

[1] Laws of Nashville, *already cited*, p. 917.

by means of an ordinance whose preamble set forth a very touching tale of woe.[1] "After diligent and persistent effort, and assiduous and unabated labor and application to the requirements of this project," said the whereas clause, "it has been ascertained and determined to be a physical and mechanical impossibility to fully construct and equip its railway for operation within the time limit as specified," and "it has been further determined . . . that it would require much more time than the space of two years to build the power-house alone such as would be required and necessary for the operation of its railway, to say nothing of the long and indefinite period of time that would be consumed in obtaining electric cars or engines, and other necessaries for the equipment for such operation," and "it has been further determined, after the most careful and prudent investigation, that capital and financial backing for the company in the promotion and furtherance of its greatest enterprise cannot be obtained or enlisted . . . because of the short space of time within which the company is required to construct, complete, equip and operate its railways," and that the success of this enterprise is of "great importance to the public and to the people of the city of Nashville and thereabouts." No doubt the enterprise was an important one and needed the additional time, but one can hardly avoid entertaining the suspicion that the exuberant rhetoric of the "whereas" clause shows the effect of the southern climate.

The Memphis interurban franchise of September 20, 1907, reserved to the legislative council of the city, the right to revoke the grant as to all streets not then occupied unless the company had 100 miles of interurban tracks in operation by May 1, 1911.

459. Freight and express business; switching cars; furnishing power; no discrimination in rates.—Detroit is one of the cities where no interurban franchises have been granted. Until the interurban companies all came under the direct control of the Detroit United Railway, it was customary for local crews to take charge of the interurban cars at the city limits. While there are no interurban franchises, strictly speaking, in Detroit, the city did pass an ordinance, April 16, 1901, authorizing street railway companies in the city to

[1] Laws of Nashville, *already cited*, p. 927.

transport certain kinds of freight.[1] This ordinance was subject to amendment, alteration or repeal at any time, and unless sooner repealed it was to expire by limitation November 14, 1909, the date when some of the most important local street railway franchises, covering a part of the lines used by the interurban cars, would expire. Under this ordinance the local street railways were authorized "to carry packages, merchandise and other light freight, milk, farm produce and garden truck, either on their own account or for others, on any lines or tracks" within the city belonging to the companies. It was stipulated that the freight and merchandise were to be carried in suitable cars "in appearance as like that of passenger cars as the character of the business will permit," the character, construction and design of the cars to be subject to approval by the common council. It was also stipulated that the street railway companies should not charge higher rates on any class of freight to or from suburban cities or towns than the rates then charged by the steam railroads. Within a radius of two and one-half miles from the city hall, each car was to be a trolley car and operated separately. Outside of that circle trains of two cars each might be operated. Also outside of that circle the companies were given the right to haul sand, gravel and crushed stone.

All express freight cars were to be equipped with air or electric brakes. The operation of freight cars was not to be permitted to interfere with passenger traffic and no freight cars were to be stopped in the streets to receive or discharge freight. Between 6 A. M. and 8 P. M. cars carrying freight were not to pass over any line oftener than once in two hours. Suitable freight stations were to be provided. No discrimination in freight rates was to be made as between companies or between shippers. The common council reserved the right, on complaint, to establish and fix rates for express and freight. The local companies were required to report to the city quarterly, the number of freight and combination passenger and freight cars hauled into or out of the city, and pay into the city treasury fifty cents for every car so hauled. All conductors and motormen employed on cars carrying or transporting freight within the city limits were to be citizens of the United States and "members in good

[1] Compiled Ordinances, 1904, *already cited*, p. 274.

standing of Division No. 26 of Detroit, or some other division of the Amalgamated Association of Street Railway Employees of America." Nine hours were to constitute a day's labor for such conductors and motormen, and it was to be completed within ten consecutive hours. Any street railway company availing itself of the privileges of the ordinance was required to keep its tracks "sufficiently sprinkled with water to prevent the dirt and dust from the street from rising therefrom."

By a franchise granted by the city of Baltimore, April 27, 1906, the Baltimore Terminal Company, the Washington, Baltimore and Annapolis Electric Railway Company and the Baltimore and Annapolis Short Line Railroad Company were all authorized to transport over certain lines of railway to be constructed under this grant, "baggage, mail, express matter, milk, truck and light freight: provided, however, and it is one of the conditions on which the rights and franchises embodied in this ordinance are granted, that the mayor shall have at all times the right to regulate and determine what kind and what quantities of goods or freight shall be so transported, to regulate and determine the character, size and number of cars in which said goods or freight shall be transported, and the hours during which the same shall be transported, and generally to make all regulations and rules for the government of such traffic, and to change the same from time to time." [1]

The St. Louis Electric Terminal Railway Company, under its franchise of April 6, 1907, was authorized to operate cars "for the transportation of passengers, baggage, United States mail and express matter," but the express matter was to be "transported only in enclosed cars, not exceeding in size, and similar in finish and exterior to the passenger cars used" by the company. The words "express matter" were to be "restricted to and include only goods, wares and merchandise in packages or boxes, and in such quantities as are now commonly carried by express companies." It was stipulated that "no baggage, United States mail or express matter shall be received on or put off any cars except when such car is within a station or depot of such railway company, and all of such stations or depots shall be located on property leased

[1] Public Service Corporations of Baltimore, *already cited*, p. 270.

or owned by said railway company." The company was authorized to operate one trailer in connection with passenger cars only, and between 11 A. M. and 5 P. M. of the succeeding day two trailers in connection with express cars only. The company was authorized, however, "to operate Pullman or sleeping cars not to exceed three in number in any one train."

The exact limits of the functions of the interurban railway are variously defined in different cities. The following section taken from the franchise of the Salt Lake Valley Railway Company of May 16, 1900, shows the Salt Lake City definition of an interurban railway in interesting detail:[1]

"Said grantee, its successors and assigns," runs this ordinance, "shall have the right to do a general passenger business and in connection therewith shall have the right to do an inter-urban express business for hire on said railway, and shall be allowed to load and unload such light inter-urban express matter only at such places as shall be permitted by the city council of Salt Lake City, provided, however, that said corporation, its successors and assigns, shall run no freight trains or freight cars upon said road, excepting only for the purpose of hauling material for the building or repair of its road or the repair of the streets herein required, and its privilege of doing an inter-urban express business is limited to carrying the same in a closed express car in connection with its regular traffic or in a closed compartment in connection with the passenger car; the intention being to prohibit said grantee, its successors or assigns, from doing a general railway business except in the carrying of passengers and light express matter in its own cars in the manner hereinbefore provided."

By another ordinance approved September 26, 1906, Salt Lake City authorized one, H. P. Clark, as trustee for a corporation to be formed under the laws of Utah, to construct an urban and suburban railroad through the city, with the right to carry passengers, freight, express and mail matter.[2] No freight was to be hauled east of Eighth West street except between midnight and six o'clock in the morning. It was provided that "all express and mail matter transported within the city limits shall be carried in cars of the same general outer design and finish as the passenger cars, same to be arranged so as to entirely inclose the loaded matter, and all cars, if operated in trains, shall have not more than one trail car to each motor car; provided, that no freight car be permitted to stand on any track or switch, nor shall the freight be loaded or unloaded on the streets of said city."

[1] Book of Ordinances, Salt Lake City, p. 528.

[2] Bill No. 126.

The South Bend interurban franchise provided that the baggage cars and express cars should be used exclusively "for parcel express and baggage and small merchandise," should not at any time be operated east of Laporte avenue more than two cars in a train, and should not be unloaded except at the company's baggage room. "It is agreed and understood," runs this ordinance, "that the above regulations for the transportation of freight, baggage and express are temporary in their nature, and the city reserves the right to make such other additional regulations regarding the transportation of freight, express or baggage or the number of cars in any one train as the Common Council of said city may, from time to time, by ordinance, require."

The Clarksdale, Covington and Collierville Interurban Company by the terms of its Memphis franchise was forbidden to discriminate against the city of Memphis or its citizens in passenger or freight rates "or in any way whatsoever." The company was required, when called upon to do so, to "switch without charge all cars loaded with freight of all classes to and from other railroads, industries, warehouses, persons, firms and corporations connected with or located" on its tracks within the switch limits of the city, if such freight came in or was destined to go out over its lines. For switching other cars, the company was not to charge more than two dollars per car, without discrimination, empty cars to be switched free. The company was required to deliver to warehouses and sheds and to other carriers within the drayage limits of the city all consignments of cotton coming in over its tracks. No other company was to be permitted to enter Memphis over this company's tracks, until such new company had made a binding contract with the city not to discriminate in any way against the city, its shippers or its citizens.

On June 14, 1902, the city of La Crosse granted a perpetual franchise to the La Crosse and Eastern Railway Company.[1] By this grant the company was given express authority to construct and maintain tracks from its main route "to connect with any mill, manufactory or other industry abutting thereon," on request. It was stipulated in this ordinance that the company should, "upon reasonable and equitable

[1] Ordinances of the City of La Crosse, Wisconsin, p. 78.

terms, and at all times, either provided by regular published time card showing schedule for operation of different trains upon each line, or by special agreement among themselves, receive promptly and expeditiously handle, switch, make-up and place the cars of any other electric road which may be hereafter authorized by the common council of the city of La Crosse, to connect with the said grantee's road to or from any mill, factory, depot, or place of business along the line of said grantee's road within the city of La Crosse."

Another interurban franchise was granted by the city of La Crosse, August 14, 1903.[1] By this grant the "principal business and purpose" of the La Crosse and Black River Railroad Company, the grantee, was described as being to construct, acquire and operate "a street-urban or inter-urban railway, for the transportation of passengers, freight, mail and express" within the city of La Crosse and the adjacent and tributary territory, and to extend its railway to other cities, villages and towns, especially in the counties of La Crosse, Jackson and Clarke. This company was authorized to furnish electrical power to manufacturers and others in the city of La Crosse in quantities of not less than twenty-five horse power to any one customer.

460. Central passenger and freight stations; loop operation.—As we have already seen, it is a usual provision of interurban franchises to forbid the loading or unloading of freight or express matter upon the public streets. This provision is necessary to keep the streets from being blockaded and rendered more or less useless for ordinary vehicular traffic. It is almost as imperative that interurban lines should have a passenger depot; for the cluttering up of the streets by the crowds standing around waiting for the interurban cars at the down-town terminal ought not to be tolerated where it can be helped. It is accordingly desirable that an interurban grant should make definite provision for both freight and passenger terminal stations.

The La Crosse and Eastern Railway Company's franchise stated expressly that the right to construct the company's road over the route described in the ordinance was conditioned upon the use of the company's tracks, switches, turnouts, depot grounds and buildings being extended to every other

[1] Ordinances, *already cited*, p. 99.

electric railway seeking and obtaining entrance into La Crosse from outside points, the purpose being to provide a common and joint route and union depot and ticket office for every electric railway from La Crosse or from suburban points into La Crosse.

In Indianapolis, as will be shown in a later section, the local street railway company is required to furnish passenger and freight stations for the interurban roads. In Columbus, as also will be seen later, loop operation is provided for. This is the case, too, in the Kalamazoo interurban franchise already mentioned. If a satisfactory loop in the central business district can be had, it is of great benefit in connection with interurban traffic, as it tends to dissipate terminal congestion and interferes the least possible with other traffic. Loop operation does not in any degree, however, lessen the need for a central freight station where the cars can be run in, off from the streets, for loading and unloading.

461. Compensation for interurban grants: free service; money payments; street improvements; suburban parks; location of power house and car shops in the city.—A unique method of compensating the city for an interurban franchise is found in an ordinance of Boulder, Colorado, granted in 1907 to the Denver and Interurban Railroad Company.[1] By the terms of this grant the company was required to pay to the city annually "a sum of money equal to seven and one-half cents per capita, based upon the total population within the limits of the City of Boulder." It was stipulated that "in case of any difference of opinion between said Railroad Company and said City as to the total population of said City as the basis for the foregoing computation, then at the request of either party, an enumeration of the inhabitants of said City shall be taken under the direction of two persons, one to be chosen by each of said parties, and the expense thereof shall be borne equally by the Railroad Company and said City." Until further action should be taken in the matter, an estimate of 12,000 population was agreed upon. The compensation so paid by the company was to be in lieu of any car or other license or occupation tax that might be assessed by the city, but was to be in addition to the regular state, county, city and school taxes.

[1] Ordinance No. 559.

The Baltimore franchise mentioned in the preceding section provided for the payment to the city of a tax on gross receipts equal to four and one-half mills for each adult passenger carried. This would be equivalent, in the case of five-cent cash fares, to the nine per cent park tax on gross earnings exacted of the Baltimore street railways. On gross receipts derived from mail, baggage, express matter, milk, truck and light freight, the Baltimore interurban companies were required to pay to the city a tax of one per cent. This tax was to apply to all such matter carried over the railroad within the city limits without reference to the place of origin or destination of the matter so transported. The Baltimore Terminal Company was also to pay the city, $500 a year, and nothing in the ordinance was to be taken "as in any wise prejudicing the pending contention of the city with reference to the assessability and taxability of street franchises or easements."

The Clarksdale, Covington and Collierville Interurban Company was required to pay the city of Memphis two per cent of "its gross receipts from all fares collected on cars running wholly within the city, calculating each fare at five cents, and five cents for each trip of each car entering or departing from the city, engaged in suburban or interurban business." It was stipulated that these payments should not be "in abatement or reduction of any tax levied by the city." Salt Lake City imposed on one company [1] the obligation to "pay into the city treasury one per cent of its gross earnings each and every year on its entire system in the state of Utah," but otherwise this company was not to be "liable to any per capita tax whatever to the city." Another Salt Lake franchise [2] imposed upon the grantee the obligation to "plat and improve into a park a portion of any or all of the streets" upon which the grantee's road was constructed. It was provided in this franchise that "said parked portion shall be of such width as may be determined by the City Council, but not to exceed thirty feet, and shall be enclosed by a line of curbing with the tracks in the center of said space, leaving cross roadways at each intersecting street, and intermediate driveways not more than 330 feet apart." It was also stip-

[1] Salt Lake and Suburban Railway Company, franchise of August 14, 1902.
[2] Grant to H. P. Clark, approved September 26, 1906.

ulated that "in said parked portions the grantee shall furnish and plant trees of the kind and at intervals to be designated by the City Council, and shall plant with grass, and keep in good order, the space between the curbing and lines two feet outside of the outer rails of the track." The grantee was also required to keep the trees and grass in good order, but the city was to furnish the necessary water free of charge. The grantee was also to pay the city one and one-half per cent of his gross receipts from passenger business within the city during the five-year period beginning one year after the acceptance of the franchise, and two per cent thereafter, but the sum so to be paid was never to be less than $1000 a year.

Nashville even required the Nashville & Gallatin Electric Railway to establish and maintain a suitable park within a reasonable distance of the city "open to the free use of the public and sufficiently large to accommodate all who may go there for a recreation and amusement." Moreover, the fare to be charged from any point in the city to this park was not to exceed five cents. A restriction in this company's franchise was the provision that "no convict labor, nor any product of convict labor, shall be used by said company, or any person, company or corporation working for them, in any part of this work." The company was required to maintain its home office in Nashville, and in case any power except water-power was used in the generation of electricity for the company's railway, then the company's principal power-house also was to be located and built within the city.

Under a franchise granted April 28, 1908, by the city of Dallas the Texas Traction Company was required to maintain its general and main offices in Dallas, and to pay the city a bonus of $500 a year for the first five-year period and $1500 a year thereafter during the life of the franchise.[1] One of the Newport, Kentucky, franchises, stipulated that the power-house should be within the city limits.[2]

Some interurban franchises provide for the free carriage of policemen, firemen, letter-carriers and sometimes other officials. The Kalamazoo free list includes "such city officials as may be required by the City Council to wear a distinctive

[1] Franchise Ordinances of the City of Dallas, *already cited*, p. 221.
[2] South Covington and Cincinnati Street Railway Company ordinance, passed May 19, 1892.

badge." The Dallas free list includes officials generally and the city engineer and his assistants. In Memphis the interurban company is required to carry free "all regular and special policemen, police officers, firemen, while on duty, the mayor and members of the City Council, and of the Board of Public Works, Police and Fire Commissioners, Water Commissioners, Park Commissioners, members of the Board of Health, the members of the Board of Education, City Superintendent of Schools."

The most logical form of compensation in money, if such compensation is to be exacted for interurban franchise privileges, is a payment of a certain amount per car trip over city tracks, or a per capita payment on the Boulder plan. There is much to be said in favor of the latter scheme, especially where a small town is to be connected with a large one some distance away; for under such circumstances the traffic on the line will be likely to increase in much the same proportion as the population of the smaller town. Either all the folks in the little place will go shopping in the big one or the little one will be a suburban residence town for the business men of the big place, or both.

462. Term of franchise; joint use of tracks; relation to terminal facilities; reserved right of purchase. — The duration of interurban franchises where the local street railway tracks are used may either be indeterminate, that is to say, subject to revocation at any time, or coterminous with the local street railway grants, or for a shorter period. Where interurban lines enter a city over private rights of way, they are more analogous to steam railroads, and there is more excuse for long-term grants. Indeed, in a certain sense interurban lines, even though they come in over the tracks of local companies, have an especial claim to an assurance that their rights will continue indefinitely. The city cannot well reserve the right to purchase and operate an entire interurban system, and yet the terminal rights in the big town constitute the interurban company's principal inducement to traffic. It might be urged that the city should either grant the right to the interurban lines to use the local tracks for a long period of years, no matter what changes may take place in the ownership of the city street railways, or that the city should guarantee the acceptance of the interurban cars at

the city limits, either by itself or by a local company, and the operation of the cars to and from their destination down town. In view of the additional burdens which interurban cars impose on the city streets and on account of uncertainty as to the direction and extent of the future development of the interurban business, it is probably better on the whole to keep interurban franchises indeterminate without any guarantee of compensation in case they are revoked. The advantages of interurban traffic are so great that no city is likely permanently to exclude interurban cars from its streets, after they have once gained an entrance. It can almost be assumed that car tracks once laid in a street will never be pulled up, unless the street becomes unadapted to the operation of cars, and perhaps not then. It is almost as certain that the easement of the interurbans will not be seriously interfered with. Habit is too strong to permit such interference.

The terms upon which the city may admit other local or interurban companies to use the tracks constructed under a particular franchise are important and interesting. By an ordinance passed March 22, 1906, the city of Milwaukee granted an interurban franchise to the Milwaukee-Northern Railway Company, and reserved the right to grant the joint use of this company's tracks, roadway and motive-power within the city limits to any other person, company or corporation owning or operating an interurban railway or a suburban street railway whose business was of like nature to that of the grantee under this ordinance, on condition that reciprocal rights should be granted by such other parties over their railway within the city.[1] Before using any tracks constructed under this ordinance the other party was to pay a just and adequate compensation for such use, the amount to be fixed by agreement or if they could not agree within sixty days, then by arbitration. In case of arbitration, each company was to appoint an arbitrator and the mayor was to appoint one. The arbitrators might fix the compensation "either in gross or payable in installments." The arbitrators were to have regard to the character and amount of the use to be made of the property by the new party, and their decision was to be final and binding upon both parties. A certified copy of the new company's original application to the grantee

[1] General Ordinances of Milwaukee, 1906, *already cited*, p. 668.

under this franchise was to be filed with the city at the time the application was made, and the final award of the arbitrators was also to be filed with the city clerk and kept in his office. If either party failed to name its arbitrator he could be named by the mayor. The compensation fixed in the award of the arbitrators might be revised from time to time by similar proceedings on application of either party. It was stipulated, however, that each party should have "a paramount and preferential right" to its tracks and power within the city limits. This franchise also reserved to the city the right to purchase the grantee's property within the city, or so much of it as, in the judgment of the council, it would be to the best interest of the city to acquire. The city was authorized to take over buildings, grounds, machinery, tracks, rolling stock and other physical property required for the operation of the railway within the city, except cars used for operation outside the city. The price was to be based on the actual value of the physical property at the time the agreement or the arbitration was entered into. It was stipulated, however, that if the city purchased the line, then the company and its successors were to have "the right to run, over the line, cars coming from interurban lines, at reasonable rates, including in such rates, the right to use depots and terminals which the city may have acquired."

In the South Bend franchise of the Chicago and Indiana Air Line Company, the company was required to exchange trackage facilities with any other interurban company willing to enter into reciprocal arrangements, on condition that the new company would pay to the grantee under this ordinance three cents for every passenger carried by such new company over the grantee's lines. But the city reserved "the right to designate any and all interurban railways that shall have the privilege of entering upon the lines herein granted." It was provided, however, that the grantee's tracks east of Lafayette street were to be "free territory" for joint use for street railway purposes upon terms to be agreed upon by the companies directly interested, or, if they could not agree, then to be determined by the board of public works and approved by the common council. For the use of the grantee's tracks in the free territory, the compensation was to be "merely for reasonable damage to its tangible properties." The city

also reserved the right to grant a joint use of any of the company's tracks within the city for the hauling of baggage and express cars, the compensation to be fixed in the same way as in the case of the free territory.

The Dallas interurban franchise of September 12, 1906, reserved to the city not only the right to let other interurban companies use the grantee's tracks, but also the right to permit local street railway companies to use not more than six blocks in any one place of the grantee's road.

The franchise of the Newport Electric Street Railway Company, of Newport, Kentucky, stipulated that any other street railway company might use the grantee's tracks over the bridges across the Ohio river and on not more than seven squares at the Newport end of any such bridge. The new company would be entitled at once to the use of the grantee's tracks and power, upon executing a bond, in a sum to be approved by the mayor, to cover the compensation for such use pending the determination of the amount by agreement or arbitration. The compensation was to be fixed at a rate per passenger, and either company would be entitled to a reappraisement once every five years.

The Salt Lake and Suburban Railway Company's franchise provided "that whenever the city council shall find it necessary or desirable to grant to any other street railroad company a franchise over any of the streets covered by the grant herein, to secure to such other company a connection with any important center or terminus, the grantee herein shall allow running arrangements over grantee's tracks to such other company, upon such other company making equitable payment for constructing, maintaining and operating the portion of said grantee's tracks so used."

The city of Kalamazoo reserved the right to let other interurban companies connect with and use the tracks and electric power of the Kalamazoo, Gull Lake and Northern Railroad Company, upon paying a reasonable compensation for such use and on the further condition that their running schedules should conform to those in operation by the company owning the tracks and that such company should have the right to enforce regulations as to fares and transfers. It was also made a condition of the granting of joint trackage rights "that such interurban railroad does not in the judgment of

the City Council unfairly parallel and compete with the company of the grantees herein, in the territory through which the railroad . . . is constructed." The city also reserved the right, upon giving six months' notice, to purchase at any time "all the tracks, switches, sidetracks, Y's, poles, trolleys, feed and telephone wires or other property built, laid down or erected by virtue of this ordinance, upon the streets, avenues, alleys and public places of the City of Kalamazoo." The price to be paid was to be the fair cash value of the property as determined by three appraisers to be appointed by the circuit judge of Kalamazoo county, and payment might be made in money or in bonds of the city drawing four per cent interest "or in some other lawful manner." In case the city purchased the property, the company would have the right thereafter to lease the use of the tracks for the operation of its cars upon paying a rental limited to four per cent per annum on the purchase price, plus one-half a cent for each passenger paying toll or fare to the company for passage over any portion of its route within the city limits. But in addition to paying this money rental, the company would have to maintain the tracks and equipment. In case the company constructed the down-town loop described in the franchise, it was to credit to the city one-half a cent for every passenger carried over the loop and when the sum of these credits was equal to the total cost of the loop with interest at five per cent per annum from the date of construction, the title to the loop would vest in the city. Thereafter the company would be required to pay the one-half cent per passenger as rental for the use of the loop, and also maintain it, except that if other companies used it, the cost of maintenance would be shared by them. The provision requiring the company to set aside one-half cent per passenger using the loop was not to go into effect, however, until the expiration of the local franchise of the Michigan Traction Company, and after that date if the grantee had not constructed the loop and the city had not purchased the grantee's property, the grantee would be required to pay the city one-half cent for every paying passenger carried by it in the city.

An echo of unpleasant rivalries of railroad companies in connection with urban terminal facilities is heard in one of the provisions of the Nashville franchise of the Nashville &

Gallatin Electric Railway.[1] This grant stipulates that it shall not go into effect until a contract has been executed between the grantee and the Nashville Terminal Company and the Tennessee Central Railroad Company "fully protecting the latter two companies against the use of the franchise hereby granted, or any part of the line of railway hereby permitted to be constructed within the city limits, directly or indirectly, to the detriment of the said Tennessee Central Railroad Company, or any other railroad of the said Nashville Terminal Company, for the period of ninety-nine years from the first day of May, 1902, or for such period, less than ninety-nine years" as the Louisville & Nashville Terminal Company and its lessees shall continue to refuse to admit the lessees of the Nashville Terminal Company to the use of the Louisville & Nashville terminals "on just and equal terms without discrimination." As expressly stated, the ordinance was granted with the understanding and upon the condition that this provision should be permanent and binding upon both the grantee and the city, irrevocable by them and "not defeasible by either." The required contract was duly executed, and contained a stipulation that the tracks, cars and motive power of the Nashville & Gallatin Electric Railway and the Nashville & Columbia Electric Railway should "not be used or employed by them or either of them or by their successor or successors or by any lessee or tenant of them or either of them or their successor or successors, for the purpose of transferring or conveying freights to or from any point within the city of Nashville or its suburbs" from or to the Louisville & Nashville Railroad, the Nashville, Chattanooga & St. Louis Railway or the Louisville & Nashville Terminal Company so long as the latter companies continued to discriminate against the lessees of the Nashville Terminal Company in the matter of terminal facilities. It was declared to be the "purpose and intent" of the contract to provide that the tracks of the Nashville & Gallatin Electric railway and of the Nashville & Columbia Electric Railway should not be used, directly or indirectly, for the purpose of enabling the lessees of the Louisville and Nashville Terminal Company to gain admission to the premises and facilities of the Nashville Terminal Company while at the same time denying to the lessees of the

[1] Laws of Nashville, *already cited*, p. 926.

latter company admission to the terminal facilities of the Louisville & Nashville Terminal Company.

463. Interurban route over private right of way; the Lima and Toledo Traction Company franchise—On September 9, 1907, a franchise, unlimited in duration, was granted by the city of Toledo to the Lima and Toledo Traction Company for the construction of an electric railway across various streets in the line of its route on private right of way.[1] The company's tracks were not to take up more than a strip twenty-two feet wide crossing any street, and gates were to be maintained at three or four specified crossings until such time as the grades of the railway and the streets were separated. The company was required, moreover, to eliminate these grade crossings entirely at its own expense within ten years. It was stipulated that none of the company's tracks laid on or across any public street should be used or operated by a steam railroad except during the period of construction of this line, and no such tracks were to be used for storage purposes. It was stipulated that subject to the prior use of the tracks by its cars and traffic, the company should give other interurban companies an entrance to the city over its tracks and furnish terminal facilities upon terms to be agreed on, but at a rate not exceeding three cents per passenger on incoming and also outgoing cars, but the company could not be required to receive or transport any car from any competing company. If the city should at any time engage in the operation and maintenance of cars for the transportation of passengers, it would have the privilege of using the grantee's tracks within the city limits as then existing or as thereafter extended, upon payment for such use and "upon reasonable terms and conditions." The company was required to maintain at certain points shelter houses for the accommodation of passengers and to take on and let off passengers at these points from the regular local cars. All incoming and all outgoing limited cars were to make at least one stop for passengers between the down-town terminal and the city limits. Before this ordinance could go into effect the company was required to file a written acceptance of all of its terms and conditions, and was also to pay to the city clerk the cost of publishing the ordinance.

[1] Special Ordinances, City of Toledo, p. 316.

464. Switching charges limited; city may purchase local tracks at any time; progressive rate of compensation—Portland, Oregon.—On May 23, 1906, the council of the city of Portland passed two ordinances, which later went into effect without the approval or disapproval of the mayor, granting certain franchise rights to the United Railways Company and the Willamette Valley Traction Company, respectively.[1] By the United Railways ordinance the company was authorized to construct and operate, on certain of the streets covered by its grant, "such spurs and turnouts as may be desirable or convenient for handling freight traffic," but only on request of property-owners desiring them. The company was required to switch all freight cars offered on its tracks on these particular streets "for the maximum rate each way of two dollars and fifty cents ($2.50) per car." Any person or company operating a railway line outside of the city would be permitted to operate its cars over this company's tracks subject to rules and regulations formulated by this company and approved by the council, and in case of such joint user each company concerned was to pay "an equitable and proper portion for the construction and repair of the tracks and appurtenances" so used. For this franchise, which was granted for a period of twenty-five years, the company was to pay a total of $162,500 during the period from 1906 to 1930 inclusive, the annual payment beginning at $1,700 during the first five years and gradually increasing till it reached the sum of $18,300 in 1930. Upon the sale, transfer, mortgage or lease of this franchise or of any of the lines constructed under it, the company was to file with the city auditor, within five days after the transaction, a certified copy of the deed, mortgage or other written instrument evidencing the transaction, and every transfer, whether voluntary or involuntary, was to be deemed void, unless the document was filed as required.

The company was required to give the city a bond in the sum of $100,000 to guarantee the construction, within two years' time, of a line of railway connecting Portland and Salem, unless delayed "by acts of God, strikes, riots, process of any court, or faults or delays of material men or carriers, or by other causes beyond the control" of the company. At the expiration of the franchise, the city would have the right

[1] Ordinance No. 15427 and Ordinance No. 15428, Portland, Ore.

to purchase in its entirety the portion of the railway and plant located within the city limits. The question of purchase might be brought up either by ordinance or by initiative petition signed by fifteen per cent of the electors, but in either case an affirmative vote of the people was required before the purchase could be consummated. The price paid was to represent a fair valuation, the value of the franchise being left entirely out of consideration, and was to be fixed by two arbitrators, one to be appointed by the city and one by the company. If these two could not agree they were to choose an umpire. If the company failed to appoint an arbitrator, the city council would have the right to name both arbitrators and the umpire. After the purchase of the property by the city, the company would be compelled to "pay such charges for operating cars over said railway tracks so acquired as may be fixed by the City of Portland, the said charges so fixed to apply equally and without discrimination to all other persons or corporations operating over said tracks." Wherever electric currents were used on the railway constructed under this franchise, the company or its successors would be required to "provide and put in use such means and appliances as will control and effectually contain such currents in their proper channels, and on its or their own wires, tracks and other structures, so as to prevent injury to the property, pipes and other structures belonging to the City of Portland, or to any other person, firm or corporation within said City." This franchise gave the right to "transport passengers, United States mail, express matter and freight" over the streets designated in the ordinance.

The Willamette Valley Traction Company's franchise covered a portion of the same route, but this company was not to build on streets covered by the United Railways ordinance, unless with the United Railways Company's consent, for a period of one year or such further extension of time as the United Railways Company might receive under its franchise. The Willamette Valley Traction Company was authorized to connect its road at street intersections with any other lines of railway in the city, to operate its cars from one to the other and "to construct, maintain and use convenient spurs, sidings, sidetracks, switches, curves and crossings over streets and over sidewalks and turnouts from its lines of rail-

way, maintained under authority of this ordinance, to and upon its property and other rights of way, and to and into its shops, barns, store-houses, repositories, depots, yards and terminal buildings, and grounds, and to and into the shops, mills, factories, ware-houses, store-houses, barns, depots, stations and terminal buildings and grounds of all other persons, firms or corporations" along or adjoining the streets and public places occupied by its railway. The company was authorized to use overhead or underground electrical power, storage batteries, compressed air, cables or any other mechanical power except steam motors and steam locomotives, and could at any time change its motive power and its mode of operating or propelling cars for "any more improved economical, practical or desirable method." The company's cars were limited to a speed of twelve miles an hour within the city limits, and no cars or locomotives were to be on a certain portion of Front street except between 7 o'clock P. M. and 6 o'clock A. M. the next day. The annual payments to be made for this franchise, in case the United Railways Company constructed the portion of the route granted in common to both companies, were to start in at $440 and gradually increase to $7,700 in 1930. In case, however, the United Railways Company's right to build this portion of the route should be forfeited, leaving the franchise to the Willamette Valley Traction Company alone, the annual payments were to be larger, commencing with $1,000 in 1906 and growing to $17,500 in 1930.

The provisions of this franchise relative to the switching of cars, the joint use of tracks, the filing of documents and the city's reserved right of purchase were like the corresponding provisions of the United Railways franchise except that the city reserved the right to take over the property of the Willamette Valley Traction Company at any time, instead of only at the expiration of the grant. A five-cent fare within the city limits was authorized, but "for riding in or the use of observation cars, funeral cars, mail cars, express cars, freight cars, party cars, and other special cars," the company or its successors were authorized to "charge and collect such compensation, rates and fares as it or they may desire, subject to the approval of the Council of the City of Portland."

465. Union passenger terminal provided for; express and freight business and rates limited; compensation for round trip; joint use of tracks—Indianapolis.—On August 15, 1902, Indianapolis granted a franchise to the Indianapolis Traction and Terminal Company a local street railway corporation, by which the company was required to construct or get constructed within eighteen months "a suitable and commodious passenger terminal" at some point within a specified district.[1] The tracks and train sheds of this terminal, with temporary waiting and baggage rooms, were to be ready for use within twelve months. This passenger terminal was to be accessible to any authorized suburban or interurban railway company directly or by the lines of the grantee under this franchise, and all such companies were to have the use of this terminal "for all of the purposes of passenger traffic for which the same may be permitted to be used by the Board of Public Works and Common Council of said city, under such reasonable regulations as may be prescribed by said Traction Company, without discrimination in favor of or against or among or between any of said companies." The compensation to be paid was to be fixed by agreement or by a judicial proceeding in the circuit court. The grantee was bound, also, to permit the use of its tracks by any interurban co[illegible] "from the corporate limits, or from the nearest co[illegible] point within the corporate limits of said City of Ind[illegible] to some central point and terminal in such city fo[illegible] pose of discharging and receiving passengers with[illegible] of such company to run its cars thereon to some lo[illegible] turn thereon out of said city whenever such use has[illegible] mitted by the Board of Public Works and Common [illegible] said city." In case the grantee was unable to furnish[illegible] propel the interurban cars, the interurban compa[illegible] have the right to establish a power house of its own[illegible] tain feed and trolley wires on the grantee's poles.[2] [illegible] to joint use of tracks, poles and terminal facilit[illegible] apply, however, only to interurban companies who[illegible] extended for at least six miles from the central [illegible]

Upon the same date, August 15, 1902, when this [illegible]

[1] Laws and Ordinances, Indianapolis, *already cited*, p. 1072.
[2] *See* Act of the Indiana legislature, approved March 8, 1899, "Laws and Ordinances," Indianapolis, *already cited*, p. 176.

was granted, separate grants were made by the city of Indianapolis to seven different interurban companies.[1] On August 21, 1902, an eighth company received a franchise,[2] and on June 4, 1903, a ninth was admitted to the city.[3] All of these franchises were substantially identical except as to rates. They probably constitute the most notable group of interurban franchises yet granted by any city in this country. As a sample of these grants we may take the franchise of the Indianapolis and Eastern Railway Company. This grant described a specific route for the interurban company over the tracks of the local street railway companies into the heart of the city, but authorized the interurban company and the local companies to agree on a different route within a year after the grant went into effect. Thereafter, the interurban company's route in the city was to be subject to redesignation once every five years by the board of public works or by the local street railway companies with the board's consent. But the route was always to connect the interurban line with the central passenger and freight terminals to be provided by one of the local companies. The company was required to waive release and relinquish "completely and forever" any rights within the city limits accruing from contracts with the town of Irvington or the county commissioners of Marion county. It was stipulated in this grant that all regular passenger cars of the interurban company, after entering the city, "shall stop at all intersecting streets on signal from waiting passengers, or passengers on such cars desiring to leave the same, and shall take on and carry all passengers desiring to take passage on any such cars for the purpose of being transported between different points on the line over which said cars are operated in said city." It was provided, however, that no baggage other than hand baggage and no express or freight matter should be unloaded or taken on at any street crossing. The company was required to charge a five-cent fare for passage over its line within the city limits and was forbidden to discriminate, either in fares or freight rates, against passenger or freight traffic to or from Indianapolis in favor of any other point on the company's line. The company was required to operate its cars with due reference

[1] Laws and Ordinances, Indianapolis, *already cited*, pp. 683-705, 716-776.
[2] *Ibid.*, p. 705. [3] *Ibid.*, p. 672.

to the running schedules of the local street cars and not to interfere with them in any way. The company was to run at least one car every two hours from six in the morning till eleven at night, but the board of public works reserved the right to fix the running schedules within the city "to the end that there shall be uniformity and regularity in the running of all the cars of the several companies in said city, and also prompt and efficient service." Cars were to be stopped only at street crossings and at the terminals.

It was expressly provided that the company "may at all times carry in its passenger cars, or in suitable compartments thereof, provided for such purpose, or in mail, express or freight cars of a style or pattern to be approved by the Board of Public Works, such baggage belonging to its passengers, being transported in such passenger cars, as is usually allowed to be carried by passengers in steam railroad companies' cars, and also the United States mail, and such express matter and merchandise as may be enclosed in boxes, crates and parcels, so as to be easily handled, and so as not to be unsightly in appearance or offensive to sight or smell, and also such packages and parcels as are usually carried and delivered by messenger service." There was a further proviso, however, to the effect that no live animals other than hunting dogs should be carried in the cars, except that fowls, "properly secured in boxes or coops," might be carried between 12:30 A. M. and 4:30 A. M. Moreover, all baggage other than hand baggage, and all express matter, parcels and merchandise was in no case to be loaded or unloaded at any point in the streets or public grounds of the city, except at the central station and terminals, where it was to be delivered for distribution. The company was also authorized to haul and handle other kinds of freight, except live stock, when a central terminal had been provided, but such freight was not to be of a character offensive to sight or smell. Freight could be delivered at the terminal and held for delivery to any part of the city, or for transfer to steam railroad lines or to other suburban or interurban lines. Pending the construction of the terminal freight station, the company was authorized to secure from the local companies the right to stand its cars on some line of "dead track," the line selected for the purpose being approved by the board of public works, and no

car to stand more than fifteen minutes at any one time in loading or unloading. The city reserved the right to regulate by order or ordinance the company's freight-carrying, and to change the route of the cars "used exclusively for carrying mail, express or freight" over the local street railway tracks. The company's freight and express rates between Indianapolis and other points on its lines were not to exceed the rates charged and collected for the carriage of like freight and express matter between the same points by other common carriers, but the company could not be compelled to charge or collect less than eighty per cent of the published rates on freight and express matter charged by other common carriers at the time this ordinance was granted.

The interurban cars were to be propelled by electricity until the board of public works required the local companies to introduce some other improved motive power and then the interurban company also might be required to adopt it. If the company should at a later time be permitted to set poles and string wires in the city, or construct any other electrical appliances for the moving of its cars, it was to do so "by providing for an independent return circuit for the electricity used, or by such approved scientific methods as will prevent any injury by any such current of electricity to water pipes, gas pipes" or any other property in the streets. If the company should later be authorized to lay any tracks of its own, or if any of its tracks were brought into the city by annexation, it would be required to assume the burden of paving and keeping in repair the street surface extending to the space between the rails and the tracks and for eighteen inches on either side. The companies' cars were to be of the most approved pattern, style and finish and properly equipped, lighted, heated, ventilated and painted. They were to be provided with life-guards and all modern appliances for the safety of the company's passengers and employees. Each car was to have a headlight, which, if an electric light, was to be "so screened or shaded while said cars are within the city limits as not to interfere with the vision of approaching persons or animals." The interurban cars coming into the city were to be suitable and adapted to operation over the local street railway tracks, without injury to the pavement

if not laid or maintained above the level of the head of the rail.

As compensation for the franchise, the company was to pay the city the munificent sum of one cent per round trip of cars operated by it into the city, and the city bound itself not to require the company to pay "any other sum or sums as or for a franchise or car tax or charge, or any other special tax or charge," but this provision was to have no effect upon the company's liability for general taxation. The franchise was to run until April 7, 1933. It said:

"The limitation of time is one of the essential and governing conditions of this contract, and at the expiration of said period the rights and privileges of said company, party of the second part, to run or operate its cars within such city shall absolutely cease, and all rights under this contract shall terminate, and it shall be deemed and held a trespasser if it shall thereafter undertake to run or operate any car over any street or alley of said city." Neither this franchise nor any rights under it were to be assigned without the written consent of the board of public works, under penalty of absolute forfeiture, and no trackage rights were to be given without such consent. The grant was made on condition that the interurban company should pay the local companies for the use of their tracks a sum to be agreed upon or to be fixed by the circuit court.

466. Central loop; freight station; joint use of tracks; fares to outside points limited—Columbus, Ohio.—Three different interurban companies secured twenty-five-year franchises from Columbus in 1900. The first of these, the Columbus, London and Springfield Railway Company got its franchise on April 25th.[1] The company's track was to be of standard gauge, and its rails were to be of approved standard patterns, weighing not less than 70 pounds to the yard. The space between the inner rails where double tracks were laid, was to be not more than five feet. The company was to improve and keep in repair the street surface for a width extending one foot beyond the outer rails, and was to pay for cleaning, sweeping and sprinkling this portion of the street at the rate and in the manner required of abutting property owners for the residue of the street. The company's route included a

[1] Ordinance No. 16,676.

down-town loop. The rate of speed was limited to twelve miles an hour, except on the loop, where it was limited to eight. After dark, the company's cars were to be lighted and supplied with suitable signal lights. The cars were to be kept clean, and, when the temperature outside was below 35° Fahrenheit, they were to be heated. It was expressly provided that "no car or cars shall be used on such railroad if so worn out, broken or so constructed or kept in such a condition as to imperil the lives, limbs or health of the passengers." Cars were to be run at no longer intervals than fifteen minutes, "unless prevented by unavoidable casualty," and were to be operated regularly from 8 A. M. to 10 P. M. on Sundays, and from 5:30 A. M. to 11:30 P. M. on week days. The city reserved the right to grant to other companies joint trackage rights upon equitable terms, "taking into consideration the value, cost of construction and of maintenance of the tracks so used and of the power used for operation." In case the companies interested should be unable in any particular case to agree on terms, the matter was to be referred to arbitration, and the decision of the arbitrators, "in the absence of fraud, accident or mistake of law or fact," was to be final and conclusive on both parties.

The rates of fare within the city limits and to Green Lawn Cemetery were to be five cents cash for adults, three cents for children between six and twelve years old, seven tickets for a quarter, and children under six years old attended by an adult, free. A single fare to Springfield, Ohio, was to be not more than 75 cents. It was stipulated that "for each five-cent cash fare said company shall issue a transfer slip, good for continuous passage within said city, over any line of railway connecting with its line of railway now or hereafter built, if presented within twenty minutes after leaving the car of issuing company, provided said transferee line be required by said city to accept such transfer slip for such passage." The company was bound to accept similar transfers from other companies, and in all cases where transfers were issued on payment of cash fares, the cash was to be divided equally between the two companies involved. The company was to have no right to move steam railroad freight cars or any cars used exclusively for freight, unless this right should be granted by future ordinance. As compensation for the grant,

the company was to pay to the city two per cent of the gross receipts from local passengers' fares and "local fares" were defined as meaning "only those fares for passengers transported entirely within the limits of said city, and to and from Green Lawn Cemetery," and as not including "any part of fares for passengers carried partly within and partly without" the city limits, except to the Cemetery. Whenever the company thought best to sell tickets at the rate of eight for a quarter and thirty-three for a dollar, it would be relieved of the gross receipts tax. At the expiration of the period of the grant in twenty-five years, unless a renewal had been granted, the city might after two years' notice purchase the property at an arbitrated valuation. If the franchise was not renewed and the city did not take over the property, the company would have to remove its tracks and other fixtures from the streets within eight months after the expiration of the franchise.

The franchise granted, May 2, 1900, to the Columbus, Buckeye Lake and Newark Traction Company,[1] was in most respects the same as the franchise just described. The fare to Newark was limited to 75 cents and the road was to be constructed to Newark by July 1, 1902, and if it had not been finished by that time, unless the company had been delayed by injunction or legal proceedings over which it had no control, the franchise would thereupon cease and determine without any further action by the city. It was stipulated that if at any time a loop should be constructed connecting with this company's line, the city council might require the company to run at least half of its cars, other than excursion cars, around the loop.

In the Urbana, Mechanicsburg and Columbus Electric Railway Company's franchise granted November 26, 1900,[2] there was a special provision giving the company the right to carry "passengers, United States mail, packages, express matter, baggage and freight," but denying the right to move any steam railroad freight or passenger cars along its lines within the business district of the city. All of its cars carrying packages, express matter, baggage and freight were to be loaded and unloaded in depots, or places to be thereafter designated by the company on lands abutting on its line,

[1] Ordinance No. 16,803. [2] Ordinance No. 17,534.

The company was authorized to select one depot at any point along its route inside the city to be used in loading, unloading and storing its cars and all kinds of freight except live stock, and to select another at some point west of a certain street to be used for all kinds of freight, including livestock.

467. Use of local tracks; transportation of live stock and poultry; mechanical brakes required; freight stations and union depot; compensation per car mile; local and suburban service; three cent fares; extension through the city—Springfield, Ill.—By an ordinance approved June 17, 1904, the city of Springfield, Illinois, granted a fifty-year franchise to the Illinois Central Traction Company, authorizing it to "install, operate and maintain its railway and interurban cars" in certain streets of the city over the tracks of the Springfield Consolidated Railway Company.[1] The council expressly reserved the right to withdraw the privilege as to certain of these streets at any time after the expiration of one year from the passage of the ordinance. Operation by steam was expressly forbidden, although rather liberal privileges in freight and express traffic were granted, as shown by the following provisions:

"The said company shall have the right," ran the ordinances, "to carry and transport over said lines U. S. mail, all classes of baggage, and express matter in parcels, and also boxes, crates or consignments not exceeding 700 lbs. in weight. It is, however, expressly provided that no poultry or live stock of any description shall be transported or carried over said lines, unless in crates, and that no shipments in car lots shall be accepted from any person for transportation over said lines within said city.

"It is further provided that the right herein above given to said grantee to transport or carry poultry or live stock over said lines shall be subject to such regulations as may be hereafter made by the said city council of the said city of Springfield, Illinois, by ordinance or resolution at any time, and subject further to the right of said city to prohibit the transportation or carrying of such poultry and live stock at any time by ordinance or resolution of said city council, such right being hereby expressly reserved. The trains in which such express or freight matter is transported shall be limited in length of not over two cars. * * * *

"Suitable and convenient buildings or stations shall be provided where all freight, parcels, express matter and baggage shall be discharged, and said company, its successors and assigns, before laying any turnouts or switches to enter such station, must first obtain a permit of said city council: said company, its successors and assigns to

[1] Franchise Ordinances, City of Springfield, 1907, p. 201.

have ninety days in which to provide suitable freight stations after the operation of its cars into said city shall have been begun."

The equipment and operation of the company's cars and the service to be rendered were carefully controlled in this ordinance by the following section:

"Said company, its successors and assigns, shall not suffer or permit any car or cars to obstruct any street, square or public area of said city for the purpose of receiving or discharging any freight. No cars shall be stopped on any side walk or crossing in such a manner as to impede or obstruct travel thereon, and no cars shall be stopped on any street intersections or crossings, but all cars shall pass over all street intersections or crossings before the same are stopped. All cars when in use shall be well and properly heated in cold weather and well and properly lighted at night. There shall be placed upon all cars, gongs of proper and sufficient size to warn people of the approach of said cars, for a distance of at least one hundred (100) feet, and such gongs or alarms shall be sounded at least one hundred (100) feet before said cars approach street intersections, sidewalks or crossings, and at all other places where it shall be necessary and prudent to cause such alarm to be given, but no whistles of any kind or character shall be sounded. All cars shall be equipped with air or electric brakes. At all railroad crossings, where watchmen are not located or other sufficient and proper signals operated, to designate the approach of trains or cars on such railroads, all cars used by said company, its successors or assigns, shall stop at least ten feet before passing over a railroad crossing, and the person or persons in charge of said car or train, shall go upon said railroad crossing and ascertain that no train or car is approaching such crossing, and that there is no visible danger in running such car over such railroad crossing. No car or train of said company, its successors or assigns, shall pass through, hinder or delay, or in any manner interfere with the fire department of said city, funeral or other lawful processions. The city hereby reserves the right to make such regulations as to the speed and time of running cars, operated by said company, its successors or assigns, in said city, as the public safety and necessity demands from time to time, such regulations to be made by the city council of said city."

If after the commencement of operation the company should at any time "fail for the period of three months to continue the operation of said cars into and through" the city, unless such operation had been stopped by court proceedings or by act of the city, the franchise could be declared forfeited. The company agreed not to claim the right under this grant to maintain a local street car service in the city, and it was expressly provided that this grant should not be construed as extending the period of the local company's franchise, nor as giving the grantee the right to have the tracks remain in the streets past the expiration of the local franchise, if

they continued to be owned by the local company. If the interurban company should come into the ownership or control of the tracks along its route, the city was to have the right when the local company's franchise expired to grant a new local franchise to such company as it might see fit, and the new grantee would have the right to install and operate a street railway system over the tracks so acquired by the interurban company within the city limits. But if the tracks were owned by some third company at the expiration of the local street railway franchise, then the interurban company would continue to have the right to use them.

For this franchise and another less important one acquired on the same day, the company was bound to pay the city at the rate of $500 a year after the expiration of five years from the commencement of operation until the expiration of the local street railway franchise. Moreover, if the grantee should permit the cars of "any other railway company a majority of the stock of which is not owned by the persons owning a majority of the stock of the grantee" or its successor, to use the tracks, then a further sum of $500 a year was to be paid to the city for each such additional company whose cars were permitted by the grantee to run over the route covered by this grant.

Another interesting interurban franchise was granted by the city of Springfield, December 5, 1906.[1] The grantee, the Springfield & Southeastern Traction Company, was expressly prohibited from transporting any freight or express matter over its route in the city except "in baggage cars or express cars provided for that purpose, and in parcels, boxes, or crates." The company was authorized to transport over its lines between 10 P. M. and 6 A. M. any material to be used for the construction, repair or ballasting of its tracks. This company was required to run suburban cars every fifteen minutes each way and to stop them at all street intersections where passengers desired to get on or off. The fact that this company was given the right to operate a local service is, perhaps, explained by the fact that its grant was for the construction of a new line, not for the use of existing street railway tracks. This company's local rate of fare was limited to three cents if five tickets at a time were pur-

[1] Franchise Ordinances, *already cited*, p. 219.

chased, and the company was also required to sell three tickets for ten cents. The cash fare was to be five cents. The city reserved the right, however, to require the company to interchange free transfers on the three-cent tickets with any other interurban company thereafter granted a franchise to enter the city. The grantee was also required to interchange transfers with the local company "at such time as arrangements can be made to exchange transfers on a three-cent basis." This grant, like the one previously described, was for a term of fifty years, but a provision was inserted to the effect that if at any time the courts of last resort of the state should hold the grant of the right to operate suburban cars to be contrary to law, as giving this privilege for a longer period than was permitted by law, then the company's right to operate suburban cars was to continue for the period of twenty years "and no longer."

After the first three years of operation the company was to pay the city "the sum of ten cents per car mile or fraction thereof of every mile of track built within the city limits as now or may hereafter come within the city limits by additions to the city of new territory, no matter whether such track coming in the city be on the streets or their private right of way, for all cars operated over the tracks of said company as herein authorized, except suburban cars, which rate shall be increased to twelve cents after the first ten years and no further increase shall be made during the term of this franchise; *Provided,* that the minimum amount to be paid in any one year after the first three shall be $3,000." The term "suburban cars" as used in the ordinance was defined as including "only cars used in the carrying of passengers within the city and adjacent territory, not further than some village or station not to exceed eight miles beyond the corporate limits" of the city. It was provided, however, that if the company should "transfer its passengers from any through car to any suburban car, thus evading the payment of the car mileage herein provided for, such suburban car so carrying such transferred passengers" should be deemed a through car and subject to the car mileage payment.

This ordinance provided that if at any future time the city should operate a railway or should grant to any other street or interurban railway company a franchise for a route

within the city limits as long as this company's route inside the city, and should establish a fare of three cents or less on such other line, a similar rate should become operative at once on the lines of the grantee under this ordinance, and a system of interchangeable free transfers between the companies was to be established. Moreover, it was provided that if no new interurban line should, within two years from the commencement of operation of this railway, be begun within the city to extend in a westerly or northwesterly direction to the city limits, then the city might require this company to extend its line to the city limits in the west or northwest part of the city, on streets on which " said company may be able to secure the petition for the necessary frontage of property owners as required by law in such cases, to the end that the local service of said company at the reduced rate of fare hereinbefore fixed shall be extended to portions of the city opposite or nearly opposite " to the portion to be served by the company on the original route laid down in the ordinance. The use of the extended line " as a common interurban highway " was to be granted to other interurban companies coming into town from the opposite direction. It was further provided that if the company should not, within six months after the expiration of the two-year period, secure the signatures of property owners to petitions, as required by law, asking for the construction of the proposed extension, " then if any association of citizens or business men of said city shall procure and present to the city council such petition and if a franchise shall be granted to said company pursuant to such petition, and upon like terms and conditions to this ordinance as nearly as may be, it shall be the duty of said company to build and operate said extension."

The city reserved the right to require the company to join with any other street or interurban railway company that might receive in the future a franchise for a route as long as this company's route within the city, in establishing " a union interurban station at some convenient point within three blocks of the Court House square in said city, at which station all suburban and interurban cars of all companies shall center." In case the companies could not agree on building such a station, then the first station built by any one of the companies, if available, should be deemed a union station,

and all the other companies might be required to extend their lines to it, if the necessary consents of the property owners for such extensions could be secured. If the establishment of a union station in the manner above described proved to be impracticable, then the city itself might "either directly or through some holding company for the use of said city, establish such union station," and "require the said Traction Company to extend its tracks to said station and to use the same in common with all other interurban railway companies to whom the right may be hereafter granted by said city to operate their railways over the streets of said city, and who shall also be required to use said station." But the city was not to expend "an excessive amount" for the station, and each company using it might be charged as rental its pro rata share of the interest on the cost of the station and of the cost of maintaining it.

Within ninety days after the commencement of operation within the city, or as soon afterwards as its needs might require, the company was to "establish car shops in the city of Springfield for the repair of its cars, motors and other equipment, which shops shall be permanently maintained as the principal car shops of its said line."

CHAPTER XXXV.

BRIDGE, VIADUCT AND ROAD FRANCHISES.

468. Relation of bridges and viaducts to the problems of urban and interurban transportation.
469. Terms of Congressional franchises for bridges over navigable waters: Saint Louis Electric Bridge Company's grant.
470. Old toll bridge franchises granted by the New York legislature.—Brooklyn and City Island.
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472. Toll bridges over the Ohio river between Cincinnati and Newport, Kentucky.
473. Highway viaduct and elevated railroad between the two Kansas Cities.
474. Turnpikes, plank roads and special roads or speedways.
475. Special toll road franchises in New York.
476. General turnpike and plank road laws of New York.
477. A rolling road franchise.—Cleveland.

468. Relation of bridges and viaducts to the problems of urban and interurban transportation.—A bridge over navigable waters is a part of a highway and at the same time crosses another highway of an entirely different kind. In the separation of grades of streets and railroads, a clear headway of from eleven to twenty feet at the crossing is all that is ordinarily required. But in the construction of a bridge across a water highway, provision must be made either for a draw that can be opened to let boats pass or for an elevation that will give sufficient clear space between the water level and the under side of the bridge to permit boats to pass without interference. If traffic is heavy across the bridge, the delays resulting from the opening of the draw are intolerable unless boat traffic is light. In the case of very large bridges like those over the East river in New York City, it is impracticable to construct them with a draw, both on account of the engineering difficulties involved and on account of the wasteful hindrance to bridge and river traffic that would result. Accordingly the bridges are built so as to leave a clear head-room of 135 feet above high water in the center of the stream. Construction at such a height involves enormous expense and the taking of large quantities of land for the approaches at either end.

Where bridges require long approaches, another serious problem is presented in the relation of the bridge to the intersecting streets which have to be carried under it. Where viaducts are constructed across valleys or river bottoms to connect high land on either side, provision has to be made for proper approaches and for adequate clearance over intersecting streets and railroads on the lower land. Essentially, the function of the bridge over a river and the viaduct over a valley is to furnish a through highway for land traffic at a practicable grade, thus avoiding on the one hand the expense and delay resulting from changing the mode of transportation at the water's edge, and on the other the difficulties and expense of travelling and hauling heavy loads down hill and then up again. In cities through which or past which large rivers run and in cities built partly on low lands and partly on hills or bluffs, the bridges and viaducts are a most important element in the whole above-ground transit system. Indeed, they are so important and so expensive that as a rule they are constructed and maintained by the municipalities themselves, except in the case of bridges used exclusively for railroad traffic, which are usually constructed and owned by the railroad companies as a part of their roads. At points where the termini of the bridges are in different states, private construction is sometimes permitted because of the conflicting local jurisdictions. Yet, for the most part, bridge franchises are of historical rather than current interest. Except in the case of railroad bridges, they point to conditions that are now past, under which highways also were constructed and operated by private companies for profit. Some highway bridge franchises still survive, but states and cities are not generally in the business of granting new ones.

469. Terms of Congressional franchises for bridges over navigable waters: Saint Louis Electric Bridge Company's grant.—By an act of Congress, approved February 15, 1907,[1] the Saint Louis Electric Bridge Company, an Illinois corporation, was authorized to "construct, maintain and operate a railroad, wagon and foot-passenger bridge, and all approaches thereto, across the Mississippi River at Saint Louis, Missouri," in accordance with the provisions of the general act of Congress to regulate the construction of bridges over navi-

[1] United States Statutes at Large, 59th Congress, 2nd session, chapter 923.

gable waters, approved March 23, 1906.[1] By this general act it was provided that whenever in the future Congress should authorize any municipality, quasi-municipal corporation, corporation, company or association to construct such a bridge, "the plans and specifications for its construction, together with such drawings of the proposed construction and such map of the proposed location as may be required for a full understanding of the subject," were to be submitted in advance to the Secretary of War and Chief of Engineers for their approval. The act declared that any bridge built in accordance with its provisions should be a lawful structure and should be "recognized and known as a post route, upon which no higher charge shall be made for the transmission over the same of the mails, the troops, and the munitions of war of the United States than the rate per mile paid for the transportation over any railroad, street railway or public highway leading to said bridge." The United States was to have the right to construct and maintain telegraph and telephone lines on the bridge and its approaches without charge, and all telephone and telegraph companies were to be granted equal privileges in the use of the bridge. If the bridge was a railroad bridge, then all railroad companies desiring to use it were to have equal rights on it "upon payment of reasonable compensation for such use," and in case of disagreement between the parties relative to the terms of such use or the sums to be paid, all matters at issue were to be determined by the Secretary of War "upon hearing the allegations and proofs submitted to him."

No bridge erected or maintained under the provisions of this act was at any time to obstruct unreasonably the free navigation of the waters over which it was constructed, and if, in the opinion of the Secretary of War, it did so, "either on account of insufficient height, width of span, or otherwise," or if rafts, steamboats or other water craft experienced difficulty in passing the draw opening or the draw span of the bridge, it would be the duty of the Secretary to require the parties owning or controlling the bridge to alter it within a reasonable time so as to "render navigation through or under it reasonably free, easy and unobstructed." Lights and other signals as prescribed by the Secretary of Commerce and

[1] United States Statutes at Large, 59th Congress, 1st Session, chapter 1130.

Labor were to be maintained on the bridge. If the bridge was constructed with a draw, the persons in control were required to open the draw promptly upon reasonable signal for the passage of boats and other water craft. It was stipulated that if tolls were charged for the passage over the bridge of "engines, cars, street cars, wagons, carriages, vehicles, animals, boat passengers, or other passengers," such tolls were to be just and reasonable, and the Secretary of War might at any time, and from time to time, prescribe what they should be.

In case of the violation of any of the terms of the act, the guilty parties were to be subject to a maximum fine of $5,000 for each offense, and every month of continued default was to be construed as a new offense. Moreover, if the persons owning or controlling the bridge refused to comply with any lawful order issued by the Secretary of War or Chief of Engineers, those officers might cause the bridge to be removed and the expense of such removal to be collected from the owners. It was further stipulated that unless the time for the construction of any particular bridge was specified in the act authorizing it, the bridge was to be commenced within one year and completed within three years from the date of the grant. Congress expressly reserved the right to alter, amend or repeal this act as to any and all bridges constructed under its provisions, without the United States incurring any liability to the owners on account of such action.

In granting a franchise to the St. Louis Electric Terminal Railway Company in April, 1907, the city of St. Louis required the company to guarantee that the charges for the use of the Mississippi river bridge to be erected by the St. Louis Electric Bridge Company under the Congressional franchise just described and to be used by the Terminal Railway Company's cars, should not be in excess of the following rates each way across: "For foot passengers, three cents each; equestrians, ten cents each; one-horse vehicles, fifteen cents each; two-horse vehicles, twenty cents each; three-horse vehicles, thirty cents each, and four-horse vehicles, forty cents each."

470. Old toll-bridge franchises granted by the New York legislature—Brooklyn and City Island.—The territory now included in Greater New York contains many streams, creeks, and other waterways over which bridges were constructed in

the early days. Many bridge franchises to private companies were granted, often in connection with toll road grants. Some of these old grants are quaint and interesting.

By an act passed by the state legislature, April 29, 1833, the Brooklyn and Gowannes Toll Bridge Company was incorporated for a period of fifty years and authorized, within four years after the date of the act, to "construct a good and substantial bridge across the Gowannes bay, or the mill creek which empties into said bay, in the town of Brooklyn, within half a mile of the mouth of said bay."[1] The bridge was to be constructed with a draw so as to allow a passage thirty-five feet wide along the channel of the creek. If any vessel, boat or raft was detained at the bridge for half an hour on account of the keeper's failure to open the bridge when required, the bridge company would forfeit the sum of five dollars, and for every hour of additional delay a further sum of five dollars, to be collected by the parties aggrieved, by suit. If at any time the bridge should be carried away, thrown down or destroyed by an unavoidable accident, the company would have three years in which to rebuild it. The company was required to keep "affixed in some conspicuous part of the bridge" a copy of the rates of tolls authorized by the act, as follows:

For every four-wheel pleasure carriage drawn by four horses, 25 cents; drawn by two horses, 18 cents;

For every curricle, chair or sulky, with one horse, 6 cents; with two horses, 8 cents;

For every wagon drawn by two horses, 8 cents, and for every additional horse, 3 cents;

For every sled or sleigh drawn by two horses, 6 cents, and for every additional horse, 3 cents;

For every wagon or cart drawn by two oxen, 6 cents, and for every additional yoke of oxen, 3 cents;

For every one horse wagon, cart, sleigh or sled, 6 cents;

For every man and horse, 4 cents;

For every foot passenger, 2 cents;

For every horse, jack or mule, 3 cents;

For every score of sheep or hogs, 10 cents, and so on in proportion for any greater or less number: "and it shall be lawful for the toll-gatherer to stop all persons with their teams, cattle, sheep or hogs, and everything which is liable to pay toll, until they shall have respectively paid the toll herein allowed to be collected by this act. All persons going to or from any grist-mill for the purpose of getting grain ground for their own family use, shall be exempt from toll; and likewise any person going to or from divine service, and all persons going to or from any funeral."

[1] Laws of New York, 1833, chapter 291.

The bridge was not to be opened until at least two of the judges of the Kings county court of common pleas, "not interested therein," should, "upon inspection, certify under their hands that the said bridge is well and sufficiently built, conformable to this act, and will admit the passage of teams of burthen." Any person forcibly passing the toll-gate or driving his live stock past, without paying toll, would forfeit not more than $20 nor less than $3, to be collected by the company by suit. If on the other hand the toll-gatherer collected more than the authorized toll, or unreasonably delayed or hindered any traveller from passing the gate, he would forfeit to the injured party not to exceed $2 and the costs of the suit brought to recover the forfeit. No person was authorized to ride or drive over the bridge faster than a walk, and no driver was permitted to drive more than twenty head of cattle over the bridge at one time, under penalty of a forfeit of one dollar for each offense.

By an act passed April 30, 1864, the New York legislature incorporated the City Island Bridge Company and authorized it to build a toll-bridge over the Narrows in the town of Pelham from the mainland in what is now Pelham Bay Park to City Island.[1] This company was given a perpetual franchise. Its bridge was to be constructed so as not to impede navigation, with a draw to open at least forty feet "so as to permit vessels with standing masts conveniently to pass and repass through said bridge; which passageway or opening shall be freely passed, repassed and used by all persons without toll, charge or reward." The bridge was to be twenty-four feet wide in the clear and was to be floored with planks at least three inches thick. The sides of the bridge were to be "secured with good and substantial railings" at least four feet six inches high. Thirty years seem to have made a great change in the demand for prompt service, for the City Island Bridge Company was to be penalized in the sum of $5 whenever any vessel desiring to pass the bridge was delayed more than fifteen minutes through the negligence of the attendant, and was to pay the further sum of $5 for every additional fifteen minutes of delay so caused. On the other hand, a vessel that did not pass the bridge promptly when the draw

[1] Laws of New York, 1864, chapter 464.

was opened for it, would be penalized at the rate of $5 for every ten minutes of delay so caused.

The company was given the power of eminent domain to acquire the necessary lands at the bridge approaches. When the bridge had been completed and the county judge of Westchester county had certified that it was "well and sufficiently constructed and built," that it would "admit of the passage of loaded teams and other carriages," and that it was "in all things conformable to the true intent and meaning of this act," the company would be authorized to erect a toll-gate and collect tolls at not to exceed the following rates:

For every stage, wagon, carriage or hack, drawn by two or more horses or mules, 25 cents;
For every four-wheel pleasure-wagon or carriage with two or more horses, 25 cents;
For every two-wheel pleasure carriage or vehicle, 15 cents;
For every four-wheel pleasure wagon or carriage with a single horse, 20 cents;
For every cart, work-wagon, or vehicle drawn by one horse or mule, 15 cents;
For every ox-cart or other vehicle, drawn by a yoke of oxen, 25 cents;
For every horse, mule, ox or cow, 5 cents;
For any hog, sheep, calf or goat, 3 cents;
For every foot passenger, 5 cents;
For every person riding or leading a horse or mule, 3 cents;
For every sleigh drawn by not more than two horses, 25 cents; and by more than two horses, 50 cents.

If anybody was foolhardy enough to force or attempt to force the toll-gate without paying toll, he would be liable to forfeit to the company five times the amount of the legal toll, and if any one wilfully damaged the bridge or its approaches he would be liable to forfeit to the company "treble damages."

The legislature specifically reserved the right to alter or amend this act, but not to repeal it. The City Island Bridge, some years after its construction, was purchased by the town of Pelham and has since been rebuilt and is now maintained as a free bridge by the city of New York.

471. Legislative franchises for bridges over the East and Hudson rivers—New York City.—The New York and Brooklyn bridge was originally planned by a private company and construction was commenced under a special legislative franchise granted in 1867. Under this grant the New York Bridge Company was authorized to construct a permanent

bridge over the East river between New York and Brooklyn and to acquire by purchase or by condemnation proceedings "as much real estate as may be necessary for the site of said bridge, and of all piers, abutments, walls, toll houses and other structures proper to said bridge, and for the opening of suitable avenues of approach to said bridge, but not any land under water, in the river, beyond the pier lines established by law."[1] It was provided that the company should have power to "fix the rates of toll for persons, animals, carriages, and vehicles of every kind or description" passing over the bridge, that toll-gates should be kept at each end of the bridge and tolls be demanded and paid "upon entering on the bridge" and that the rates of toll should be posted conspicuously at the toll-gates. It was also stipulated that the company "shall reduce the rates of toll from time to time, so that the net profits of said bridge shall not exceed the sum of fifteen per cent per annum, after deducting the expenses of repairs and improvements to said bridge, its appurtenances and approaches, and all just and proper damages against the said corporation." The right was reserved to either New York City or Brooklyn or both together to purchase the bridge at any time at cost plus 33⅓ per cent, on condition that the bridge should thereupon be made free. The two cities were authorized to subscribe to the capital stock of the company, and issue thirty-year bonds to pay their subscriptions, or, as an alternative, the cities might guarantee the company's bonds.

By an amendatory act passed in 1869 the legislature prescribed that so long as the cities of New York and Brooklyn retained their stock in the bridge company, they should be represented on its board of directors, the one by its mayor, comptroller and president of the board of aldermen, and the other by its sinking fund commissioners.[2] This act authorized the company to use land under water for the piers and towers of the bridge, and to operate or dispose of the right to operate a passenger railroad over the bridge from terminus to terminus. The bridge was to be completed by June 1, 1874.

The bridge company's charter was further amended in 1874 by provision for an increase in the representation of the two cities on the board of directors so that each city and the

[1] Laws of New York, 1867, chapter 899. [2] Laws of New York, 1869, chapter 96.

private stockholders as well, would have eight directors.[1] The directors for the cities were authorized to buy out individual stockholders who were willing to sell for the amounts paid in on their stock with interest. The bridge was declared to be a public highway "subject, nevertheless, to such tolls and police regulations" as the company's board of directors might from time to time prescribe. For the completion of the bridge, New York city was authorized to issue additional bonds to the amount of $1,000,000 and Brooklyn was authorized to issue twice that amount, the proceeds of the bonds to be paid over to the company for additional shares of its stock.

Finally, in 1875 an act was passed providing for the dissolution of the company whenever two-thirds of the stock issued to private parties had been purchased on behalf of the cities, under the terms of the act of the preceding year.[2] The bridge property was then to be transferred to trustees representing the two cities, who would be authorized to acquire by condemnation proceedings the rights of minority stockholders not acquired by purchase, and to complete the bridge and put it into operation. The trustees would be authorized to fix the tolls to be collected on the bridge and operate the bridge railroad. As a matter of fact the bridge was not completed till 1883. Since the consolidation of old New York and Brooklyn the bridge has been operated by the department of bridges of the Greater City. It is now free to pedestrians, but tolls are collected for vehicles. Private companies operate elevated railroad trains and trolley cars over the bridge from the Brooklyn end. Over 4000 round trips per day are made by the trolley cars, and for each trip the city receives a toll of five cents.

No bridge has yet been constructed over the Hudson river at New York City, but in 1890 a franchise to build one was granted by the New York legislature to the New York and New Jersey Bridge Company.[3] The site for the bridge was to be selected by five commissioners, of whom three were named in the act and one was to be appointed by the mayor and one by the governor. The terminus of the bridge in New York City was not to be below Tenth street or above One

[1] Laws of New York, 1874, chapter 601. [2] *Ibid.*, 1875, chapter 300.
[3] *Ibid.*, 1890, chapter 233.

Hundred and Eighty-first street. The bridge was to be "for passenger and other traffic," and the company would have the right to fix the tolls, but all railroads desiring to connect with the bridge were to have "equal rights of transit for their passengers and freight upon the same equal and equitable terms." The company was authorized to lease the bridge, or to charge other companies for its use such fair compensation as should be found requisite to cover the expense of maintenance, taxes, interest upon money borrowed for construction or maintenance, dividends of not more than ten per cent on capital stock and sinking fund requirements to the amount of five per cent per annum of the amount of the funded debt. The bridge was to be constructed across the river with a single span and at an elevation of at least 145 feet in the clear above mean high water at the towers and 155 feet at the center of the span, and these heights were to be "exclusive of the deflection of the superstructure from loads or temperature effects." The bridge was to be completed by January 1, 1897. The project of constructing a bridge to connect New York City with the Jersey shore is still under advisement.

472. Toll bridges over the Ohio river between Cincinnati and Newport, Kentucky.—By an ordinance passed May 12, 1868, the city of Newport granted a perpetual franchise to the Newport and Cincinnati Bridge Company to use a street necessary for the construction of the abutments, approaches and superstructure of a bridge over the Ohio river.[1] This bridge was to be used for the passage of vehicles and foot passengers and for railroad purposes. Tolls were to be at the rate of 100 tickets for one dollar for foot passengers, ten cents for a single crossing of a horse and dray or a horse and express wagon, and fifteen cents for a horse and buggy. Twenty years later the company secured from the city of Newport the right to reconstruct and change the grade of a portion of a certain street in order to facilitate the approaches to the company's bridge.[2] This grant was made on condition that the company should keep the portion of the street within the railroad track and extending three feet on either side continually in good repair, and that the company should indemnify the city against claims for damages to abutting

[1] Special Ordinances, City of Newport, p. 359. [2] *Ibid.*, p. 360.

owners on account of work done under this ordinance. In 1895 the company was authorized to reconstruct the approaches to the bridge, "including steam railway, street railway, vehicle and foot passenger way."[1] Damages to abutting property by reason of any changes in the approaches or in the street grades connected with them were to be borne by the company, as determined by a committee of assessment and arbitration consisting of three members, one to be appointed by the company, one by the majority of the abutters acting together and the third by the two so chosen, or if they could not agree, then by the mayor. The schedule of tolls which the company might charge was changed so as to provide a free passage for children under six when accompanied by parents or guardians; coupon tickets for foot passengers at the rate of four for five cents, or one cent apiece in lots of ten, twenty-five, fifty or one hundred; four tickets for $1, or 25 cents each crossing, for a vehicle drawn by four horses; five tickets for $1, or 20 cents each crossing for a vehicle drawn by three horses; seven tickets for $1 or 15 cents for each crossing for a two-horse vehicle, and eleven tickets for $1, or 10 cents each crossing for a one-horse vehicle.

On June 7, 1888, Newport granted a franchise for another bridge across the Ohio river to the Central Railway and Bridge Company.[2] This was to cross one street at an elevation of not less than sixteen feet and another at not less than eleven feet. The "bridge, its properties and appurtenances" were to be exempt from taxation during construction, and it was provided that construction should begin within a year and "be continued proportionably to completion" within four years. It was stipulated that "said bridge shall be constructed for foot passengers, vehicles and street cars, and there shall be no discrimination in favor of or against any person or corporation, but no steam cars shall be allowed to run over this bridge." The company was made liable for all damages to persons or property arising out of the construction of the bridge, and also for the expense of any changes "in the way of drainage, sewerage water and gas privileges" made necessary by the construction of the bridge. Tolls were established at the same rates prescribed for the

[1] Special ordinances, *already cited*, p. 361.

[2] *Ibid.*, p. 355.

Newport and Cincinnati Bridge Company by the ordinance of August 10, 1895, already described.

473. Highway viaduct and elevated railroad between the two Kansas Cities.—By an ordinance approved September 6, 1904, Kansas City, Missouri, authorized the Kansas City Viaduct and Terminal Railroad Company to build a viaduct from Bluff street westwardly and northwardly across the West Bottoms and the Kaw river to Ferry street in Kansas City, Kansas.[1] This grant included the right to construct two approaches to the viaduct from the bottoms, with roadways not more than 38 feet wide and not carrying any railroad track of any kind. It was "in consideration of the benefits that will ensue to the cities of Kansas City, Missouri, and Kansas City, Kansas, and the inhabitants thereof, by the construction, maintenance and operation of an elevated railroad and highway viaduct, running from near the business center of one city to near the business center of the other, recognizing the great saving of time for both travel and traffic that may be effected by the shortest possible level route; also, how commerce between the cities may be facilitated and interchanged at the least possible cost of time and expenditure of effort; and to enhance, as much as possible, the easy, convenient and rapid transportation of persons and property," that this grant was given.

The railroad and viaduct were to be on an elevated steel structure not less than 54, nor more than 112 feet wide crossing the Burlington Railroad and the Missouri Pacific Railroad tracks by 67-foot and 65-foot spans, respectively, the Kansas City Suburban Belt Railway and an adjacent railroad siding by two skew spans aggregating about 144 feet on one side and 160 feet on the other, and Mill (or Madison) street by a 60-foot span.[2] The company was authorized to construct, maintain and operate "all necessary switch turn-outs, and connecting tracks within the width above provided for said viaduct and at the termini thereof as may be reasonably necessary for track connections with other roads." Plans of the structure were to be submitted in advance to the board of public works for its approval and for the approval of the city

[1] Ordinance No. 26624; Franchise Ordinances for Public Utilities, *already cited*, p. 120.

[2] As amended by ordinance of August 8, 1905.

engineer. In case the city changed the grade of any street over which the viaduct passed, the company would have to adapt the structure to such change at its own expense. It was expressly set forth that "Kansas City assumes no responsibility in the construction, maintenance or operation of this viaduct; and no liability or obligation shall rest upon the City, either on account of defective right of way or in any manner whatever, whether herein specifically enumerated or not."

"On account of the great expense and outlay of money required to construct, maintain and operate the said railroad and viaduct," the company was authorized to charge one-way tolls between the two termini as follows:

Foot passengers, 5 cents; horse and rider, 10 cents; one-horse buggy or cart, one seat, 15 cents, two seats, 20 cents; one-horse express wagon, one passenger, 15 cents; two-horse carriage, wagon or cart, four passengers or less, 25 cents; three-horse wagon or cart, four passengers or less, 30 cents, four-horse, 35 cents; automobiles, one seat, two passengers, or less, 25 cents, two seats, four passengers, or less, 35 cents; car, or omnibus, eight passengers, or less, 50 cents; van or dray, two passengers or less, 25 cents; hearse, 25 cents; bicycle and one rider, 5 cents, two riders, 10 cents; circus and menagerie wagons, two passengers or less, 40 cents; horses, mules, and cattle, 10 cents per head; sheep and swine, 5 cents per head; threshing machines, including propelling power, 40 cents; street cars, 5 cents per passenger; for all extra passengers on vehicles, 5 cents per head.

Tolls between either terminus of the viaduct and any one of the approaches in the bottoms were fixed at rates about half the size of the rates just given.

The fire, police and water department of the city were to have the use of the viaduct and its approaches free of charge, all persons engaged strictly on city business were to be allowed to cross the structure free, and the city was to have the reasonable use of the structure, also free of charge, "for the purpose of suspending water pipes, electric wires, or other municipal appurtenances belonging to itself under the roadway of the viaduct." The company was also required to pay the city two per cent of all tolls collected within the city limits, and the company's books and records were to be accessible at all times to the city comptroller or any city officer or appointee designated by the mayor for the purpose of a full and complete inspection of them. If the company failed to turn over the percentage semi-annually, as due, the city would have the

right to take possession of the structure and operate it "until its rights in the premises have been fully attained."

The company was given twelve months from the acceptance of the grant, which was to be filed within twenty days after the approval of the ordinance, "in which to draw its plans, purchase materials, procure its right of way, and begin the construction," and three years from the date of acceptance in which to finish it, but the company was to be allowed additional time on account of any delays arising "by reason of unforeseen circumstances, or conditions, which reasonable diligence could not have guarded against," or by the act of the city. The city reserved the right to cross the approaches of the viaduct with other elevated structures, and "in view of the fact that the needs of commerce and traffic may require other viaducts to be constructed crossing the approaches," the city reserved the right to permit other companies to cross the approaches of this viaduct.

474. Turnpikes, plank roads and special roads or speedways.—In the middle of the nineteenth century toll-roads already existed or were being established almost everywhere in the United States, especially in the vicinity of the large towns. Where special construction was necessary to make a passable road, the enterprise was usually undertaken by a private company with a franchise to erect a toll-gate and levy tolls on all passers-by. The old turnpike and plank road franchises are now of importance only in the ascertainment of the status of street railways originally built on toll roads or of the price that the city, town or county will have to pay to make free roads out of those where toll-gates still linger. The public authorities have generally assumed the function of constructing and maintaining the highways free to all for travel and traffic. The main features of the toll road grants were the rates of toll collected, the obligations of the companies with reference to the maintenance and repair of their roads, the rights of the companies to grant franchises for railroad or other purposes and the terms of reversion to the public authorities or purchase by them. It is a curious fact that with the development of bicycle and automobile traffic, demanding as they do a specially prepared path or roadway, and constituting as they do something of a nuisance in the public highways, there has come a feeble suggestion of

reversion to the old policy of the toll road and of constructing bicycle paths or automobile speedways outside of the ordinary highways to be used only by those who are willing to pay for the privilege. Some years ago somebody in California concocted a scheme for the construction of bicycle paths and got an act passed by the state legislature in 1897 authorizing the local authorities of any county, city or town to "grant franchises for the construction of paths and roads, either on the surface, elevated, or depressed, on, over, across, or under the streets and public highways . . . for the use of bicycles, tricycles, motorcycles, and other like horseless vehicles, for a term not exceeding fifty years."[1] In cities no such franchise could be granted until the consents in writing of the owners of a majority of the frontage on the street along which the path was to be constructed, had first been obtained and filed with the governing body of the city. No evidence has come to the writer's attention to show that this California statute ever resulted in the successful construction and operation of a horseless vehicle path, and the decline in the use of the bicycle, coupled with its relatively innocuous character as a neighbor to other street traffic, will doubtless prevent the revival of talk about bicycle path franchises. It may be found necessary, however, to banish automobiles to private rights of way, where they can speed to suit the fancy of their owners, and, doubtless, in time we shall have to construct aerial pathways to catch the debris from flying-machines and, perhaps, suspended netways to catch the aviators themselves when their motors fail. If it comes to this, we may expect that private enterprise will inaugurate the new utility by applying to the proper authorities for locations.

475. Special toll road franchises in New York.—The old toll-road franchises granted by special acts of the New York legislature early in the nineteenth century have considerable interest on account of the light they throw upon the customs of the times and the relation of the public to highway facilities. Many of these old toll-roads are now leading thoroughfares of the outlying boroughs of Greater New York. In 1829 a road franchise was granted to the Flushing and Huntington Turnpike Company to cover a route running

[1] Corporation Laws of California, 1907, p. 119.

from the village of Flushing, now in the borough of Queens, through Hempstead Harbor to the village of Huntington in Suffolk county.[1] On this road the company was authorized to construct not more than three toll-gates and to collect tolls at the following rates:

"For every horse or mule and rider, half a cent per mile; for every chair, chaise, gig or sulky drawn by one horse, one cent per mile; for every coach, coachee, chariot, phaeton or curricle drawn by two horses, two and a half cents per mile; for every cart, stage, wagon or other four-wheeled carriage, not before mentioned, drawn by two horses, mules or oxen, one cent per mile; for every cart, wagon, sleigh or sled drawn by two horses, mules or oxen three-quarters of a cent per mile; for every wagon used chiefly for pleasure, drawn by one horse or mule, one cent per mile; for every wagon of like description drawn by two horses or mules, one cent and a half per mile; for every additional horse, mule or ox, led or attached to any carriage, half a cent per mile; for every score of sheep or hogs, three quarters of a cent per mile; for every score of cattle, horses or mules, one cent per mile; but the president and directors of said company may commute with any person or persons for the privilege of using the said road by the year or for any less time."

On some of the turnpikes tolls were not charged according to distance travelled. For example, the New Rochelle and Harlaem McAdam Turnpike Company, incorporated April 20, 1836, to build a "McAdam" road "on the most direct and convenient route from the nineteen milestone" in New Rochelle through the village of East Chester to the "Harlaem" river, was authorized to erect one full or two half toll-gates, and to collect the following tolls for passing a full toll-gate and half as much for passing a half toll-gate:[2]

"For every horse or mule with a rider, six cents; for every horse or mule led or driven, three cents; for every score of cattle, twenty cents; for every beast under a score, two cents; for every score of sheep or hogs, ten cents; and for every sheep or hog under a score, one cent; for every coach, coachee, chariot, phaeton, curricle, landau or barouche drawn by two or more horses, twenty-five cents; for every pleasure wagon on springs drawn by two horses, eighteen cents; for every chair, chaise, gig, buggy, sulky or pleasure wagon, drawn by one horse or mule, twelve and a half cents; for every pleasure sleigh drawn by two horses or mules, eighteen cents; for every pleasure sleigh drawn by one horse or mule, twelve and a half cents; for every country wagon drawn by two horses or mules, twelve and a half cents, and three cents for every additional beast; for every cart or country wagon drawn by one horse or mule, six cents; for every ox cart drawn by two oxen,

[1] Laws of New York, 1829, chapter 133.
[2] *Ibid.*, 1836, chapter 167.

twelve and a half cents; and other things not enumerated in proportion."

The judges of the county courts of Westchester county were authorized to determine the location of any toll-gate on the company's road, and to order the removal of a gate "whenever its location shall do injustice to the public or to the corporation." The company was incorporated for a period of thirty years.

476. General turnpike and plankroad laws of New York.— On May 7, 1847, the New York legislature passed a general act to provide for the incorporation of companies to construct plank roads and of companies to construct turnpike roads.[1] The limit of a company's charter was fixed at thirty years. Any company desiring to construct such a road was required to apply to the board of supervisors of the county, describing the proposed route and the character of the road to be built. After public notice and a hearing granted to all interested parties, the board might by vote of a majority of all its members authorize the construction of the road on the route specified in the application, and appoint three disinterested persons not owners of land in any town through which the road was to be constructed or in any adjoining town, to lay out the road. The company would have the right to require land for its uses by eminent domain to be held "so long as it shall be used for the purposes of such a road as such company was formed to construct." In case the company needed any portion of a public highway for the construction of a turnpike or plank road, the right to use such highway might be granted to the company by the supervisor and commissioners of highways of the town, or in case the terms for such use could not be agreed on, the company would have the right to condemn the public highway for its use. By an amendment to this act passed later in the same year,[2] it was provided that the company need not apply to the board of supervisors at all in case it secured the private lands or the right to use public highways by purchase or agreement, without resorting to condemnation, but by another act, passed three years later,[3] supervisors and commissioners of highways were forbidden to

[1] Laws of New York, 1847, chapter 210. [2] *Ibid.*, 1847, chapter 398.
[3] *Ibid.*, 1850, chapter 71.

enter into any agreement for the transfer of any public highway to a turnpike or plank road company "without they first obtain the consent in writing of at least two-thirds of all the owners of land along such highway, who actually reside on that part of the highway on which such plank road or turnpike road is to be constructed."

The original act of 1847 authorized a plank road company to erect toll-gates, "but not within three miles of each other," and to collect tolls at not to exceed the following rates:

> For vehicles drawn by two animals, one and a half cents per mile, and one-half cent per mile for each additional animal, for vehicles drawn by one animal, three quarters of a cent per mile; for every score of sheep, swine or neat cattle, one cent per mile; for every horse and rider, or led horse, half a cent per mile

It was provided, however, that "in no case shall any plank road company charge or receive rates of toll which will enable said company to divide more than ten per cent per annum on their capital stock actually paid in and invested in their road, after keeping the road in repair, and appropriating not exceeding ten per cent per annum on their capital stock invested as aforesaid, as a fund for the re-construction of their road when necessary."

Turnpike companies were authorized to charge similar rates except that the rate for vehicles drawn by two animals was not to exceed one and a quarter instead of one and a half cents per mile, and the rate for each additional animal was not to exceed one-quarter of a cent per mile. These companies, however, were permitted to earn twelve per cent dividends after paying the expenses of managing and repairing their roads.

By an act of 1848, turnpike and plank road companies were limited, in the case of persons living within a mile of the gate, to one-half the tolls authorized in the original act, and nothing was to be collected from farmers passing to and from their work on their farms.[1]

By acts of 1849 and 1850 the following classes were exempted from paying tolls to plank road companies, and the limitation on the companies' profits was repealed:[2]

[1] Laws of New York, 1848, chapter 360.
[2] *Ibid.*, 1849, chapter 260, and 1850, chapter 71.

"1. Persons going to and from any court to which they have been summoned as jurors, or to which they have been subpoenaed as witnesses.

"2. Persons going to or from any training at which they are required by law to attend

"3. Persons going to or from religious meetings.

"4. All persons going to or from any funeral, and all funeral processions.

"5. Persons living within one mile of any gate shall be permitted to pass the same at one-half the usual rates of toll, excepting farmers going to or returning from their work on their farms, who shall go free, when not employed in the transportation of persons or of the property of other persons.

"6. Troops in the actual service of this state or of the United States.

"7. Persons going to any town meeting or election at which they are entitled to vote for the purpose of voting and returning therefrom.

"8. All persons going to or returning from any grist mill or blacksmith's shop, where they ordinarily get their grinding or blacksmith's work done, shall be exempt from the payment of toll at one gate, only, within five miles of such person's residence, when he is going to or returning from such mill or shop for the express purpose of getting grinding or blacksmith's work done; but this exemption shall apply only to such parts of a plankroad as have been, or shall be, made on a public traveled highway, not theretofore a turnpike."

477. A rolling road franchise—Cleveland.—On June 27, 1904, the city council of Cleveland passed an ordinance granting a twenty-year franchise to Isaac D. Smead and associates to erect, maintain and operate "an inclined plane rolling road" in Factory street "for the purpose of conveying or moving freight vehicles, animals or other property and those in charge of the same."[1] The rolling road was to be twelve feet wide, located in the center of the street and extending a distance of 424 feet towards Ontario street from a point near Canal street. At each terminus an incline was to be erected to enable horses to get on and off the structure. The incline was to be "neatly and ornamentally constructed of stone or concrete." At the western terminus of the road the grantee was to have the right to make "an excavation in said street for the purpose of placing therein a drūm on which said rolling road shall revolve and also an excavation the entire length and width of said rolling road for concrete foundations of suitable depth to be below the frost line." The foundations were to be constructed so as not to interfere with existing pipes, sewers, drains or other structures in the street. The superstructure was to be "constructed of iron and steel and the roadway of iron, steel and wood in

[1] Special Ordinances, Cleveland, 1907, p. 230.

such manner as to make it convenient and safe for horses to use the same." It was also provided "that there shall be on each side of said superstructure substantial and ornamental iron railing, and also a sidewalk, not less than twenty inches wide, for use by drivers and other persons." The superstructure was to be lighted at night by gas or electricity. The rolling road could be operated by steam, electricity or other approved motive power, and the grantee was authorized to convey the motive power under the street from the plant where it was generated to the road. The following maximum rates were fixed:

For one-horse buggy and driver, 10 cents; for one-horse barouche and two persons, or one-horse spring wagon and driver, 15 cents; for two horse carriage and driver, two-horse spring wagon and driver, hack and driver or one-horse loaded freight wagon and driver, 20 cents; for two horse loaded wagon and driver, 25 cents; for three-horse loaded wagon and driver, 30 cents; for four-horse ordinary loaded wagon and driver, 40 cents; for four-horse extraordinary loaded wagon and driver, 50 cents; for each individual other than driver and for each foot passenger not with a vehicle, 2 cents.

All horses and apparatus belonging to the fire department were to be carried free. The grantee was not to be required to set his rolling road in motion at any time merely for the accommodation of foot passengers. The city reserved the right to regulate the grantee's rates not oftener than once in five years. The speed of the road was limited to six miles an hour. Plans of the structure were to be filed with the city engineer and all work of construction was to be done under his supervision. In case the street should be paved, the grantee would be required to bear twenty-five per cent of the cost, and the kind of paving was to be such as the abutting owners on each side of the street desired.

The city reserved the right to purchase the rolling road for a price and upon terms to be agreed on or to be determined by arbitration. In case of arbitration, the city was to give six months' notice of its intention to arbitrate, at the same time naming one arbitrator, the owner of the road was to name another within 30 days, and these two were to agree upon a third within another thirty-day period. In case the owner failed to name an arbitrator or in case the two first appointed could not agree on the third, either or both, as the case might be, would be appointed by the probate judge of Cuyahoga county. The value of the road was to be obtained as follows:

"The cost of reproduction shall be estimated and from this shall be taken a reasonable amount for depreciation. All the physical property of every nature used in the operation of the rolling-road shall be included in the valuation. To the appraised value so obtained there shall be added the sum of twenty per cent (20 per cent) thereof which shall constitute the price which the city shall pay for said property, and upon the tender of the sum so fixed the city shall take over all of said property."

The city reserved the right to decline to take the property at the price fixed but in that case no new demand for purchase could be made within one year afterwards. If at the expiration of the period of the grant the city had not purchased the road and if it did not renew the franchise to the grantee but gave it to some one else, then such other person would be compelled to take the road over at a price to be fixed as above described. Construction was to be commenced within thirty days after the acceptance of the grant.

CHAPTER XXXVI.

RAILROAD TERMINAL, SPUR TRACK, DOCK AND MARKET FRANCHISES.

478. Depots, yards, crossings, tunnels, spur tracks, docks and markets.
479. The Union passenger station at Washington, D. C.
480. The New York Central and New Haven terminals in New York City.
481. The Pennsylvania tunnels and terminals in New York City.
482. Freight railroad franchises in New York City.
483. A tunnel terminal for an electric railroad to be constructed under a forty-year franchise.—Boston.
484. Union passenger station and other terminal facilities for joint use.—Memphis.
485. Union depot franchise terminable after 20 years, Richmond, Virginia; minimum cost of depot stipulated, Salt Lake City; discrimination in rates forbidden, Newport, Kentucky.
486. A 200-year belt railway and union passenger station franchise; separation of grades; construction of switch tracks required; charges to be reasonable.—Kansas City, Missouri.
487. Spurs to wharves and warehouses; switching charges limited; joint interest in tracks may be purchased by other companies; sanitary regulations during construction.—Seattle.
488. General terminal facilities for all railroads; cars to be transferred at one cent per 100 lbs. of freight; three bonds required; terminal charges limited.—Nashville.
489. Excess profits to be rebated; tariff of terminal charges to be published; company taxed on value of abutting property.—Duluth.
490. Elimination of grade crossings.
491. A typical track elevation ordinance of Chicago.
492. Participation of street railways and other utilities in cost of grade separations; city's share of burden—Milwaukee, Memphis, Detroit.
493. Spur track franchises as a factor in the general terminal problem.
494. General spur track ordinances and policies.—Los Angeles, Detroit, Chicago.
495. Duration of spur track grants; connection with factories permitted; switching charges limited.—Toledo, Memphis, Cleveland.
496. Dock terminals.
497. A union market franchise.—Portland, Oregon.

478. Depots, yards, crossings, tunnels, spur tracks, docks and markets.—The general subject of terminal franchises has attracted little public attention in this country as compared with its vast importance. This is accounted for, mainly, by two facts. First, terminals are usually for the most part on private property, occupying public streets and places only

for crossings and at certain traffic centers, and not like other utilities extending everywhere along, over or underneath the principal streets of the city. Second, terminals are only the local facilities for handling inter-city, interstate and international traffic. In most cases the steam railroads secured terminal rights when cities were small and every encouragement was given to railroad enterprises. It is only with the enormous growth of traffic and the rapid increase of city populations that the terminal problem has become acute. The city is itself a terminal so far as commerce is concerned, and naturally nothing is so necessary for the growth of the city in population and wealth as the development of cheap, convenient and adequate terminal facilities for all the streams of commerce that center in the city. The greater the population of the urban center and the more valuable its site, the greater is the volume of commerce to be taken care of and the larger the space required for terminals in the central district. It is a case of tremendous squeezing. As land values soar, and the pressure upon the streets is multiplied, the railroads and steamboat lines require more room for stations, yards and docks. The city is fortunate which in its early days reserved ample public spaces for parks and commons and for wide streets and avenues; for it is inevitable that business should crowd up close to the edges of these reserved spaces, and when the city has once become great it is a matter of enormous difficulty and vast expense to push business back so as to leave more room for movement. In like manner, the city and the railroads are fortunate where the early reservations for terminal facilities were ample not only for the needs of the small town, but also for the needs of the great city. The vast increase in the value of terminals on the basis of the cost of reproduction is the principal factor tending to make good the mountains of watered stocks and bonds built up by the railroad companies in their early days. This increase represents the increment of site values resulting from the growth of the cities as well as the costly reconstructions and readjustments made necessary where the original terminal reservations have proven inadequate and more space has had to be acquired at the points of greatest pressure. Then, too, there is to be added the expense of crossing improvements and changes in grade made necessary by the in-

creasing conflict between street and railroad traffic. Passenger and freight depots have to be at the heart of the city, or else the entire passenger and freight business will be handicapped by a transfer expense of both time and money that is intolerable. If stations have to be enlarged, much additional space can be gained by increasing the height of station buildings, but, after all, ground space is most important, especially in the handling of trains. Depot enlargement often means the closing of streets and the displacement of expensive improvements. The yards for storing cars and switching freight may be somewhat removed from the center of traffic, but not far. These yards take up great areas of valuable land within the city limits, and require the closing of streets, the construction of viaducts and other costly readjustments that involve the city's consent or coöperation. The elimination of all grade crossings in Chicago, including the work already done, would in the opinion of the city's superintendent of track elevation cost about $150,000,000. There are still about 450 grade crossings in New York City, levying annual toll of death and waste that will ultimately compel their elimination at an expense of untold millions. In order to avoid grade crossings and bridges new roads are sometimes required to reach their urban terminals by tunnels under streets and public waters. Everywhere cities are striving to encourage manufactures. In order to do so they have to grant terminal connections with the railroads by means of spur tracks. A spur track generally means an additional burden on the streets and an increased demand on the part of the railroads themselves for adequate switching facilities in connection with belt tracks and larger freight yards. Where water traffic ends and where transfers from boat to rail are necessary, the problem of terminal facilities springs up in a new form. Now it is the waterfront, with its docks, wharves, ferry-houses and warehouse facilities, that invites a struggle for control, either between public and private interests, or between different private interests, each seeking the benefits of terminal monopoly. Finally, provision has to be made either directly by the city or indirectly by a franchise grant, for market spaces and buildings to serve as terminal or distribution centers for the daily food supplies of the city. All these terminal facilities are of the utmost importance to the city

itself. They involve its very life and the possibility of growth. Both from the standpoint of cost and from the standpoint of the public interest, terminals involve franchise questions of the first magnitude.

479. The Union passenger station at Washington, D. C.— On February 28, 1903, Congress passed an act to provide for the construction of a union passenger station and terminal for the steam railroads entering the city of Washington.[1] The terminal station was to cost not less than four million dollars and was to be "monumental in character," in accordance with plans to be approved by the commissioners for the District of Columbia. The location of the station was fixed in the act and the terminal company was given authority to acquire the necessary lands for the purpose by condemnation proceedings. The terminal was to be so constructed as to permit "H, K, L and M streets and Florida avenue to be passed and continued under it through openings of sufficient clearance to permit the use of such streets in the manner shown on the plan and profiles agreed upon by the Baltimore and Ohio Railroad Company, the terminal company, the Philadelphia, Baltimore and Washington Railroad Company and the commissioners of the District, and filed in the office of the Engineer Commissioner. The viaduct leading northwardly from the station was to be of sufficient width to carry the tracks required for the passenger traffic of the two railroad companies, and also one or more tracks for the freight traffic of the Baltimore and Ohio. The terminal company was expressly authorized, subject to the approval of the commissioners, to acquire the necessary lands within the District of Columbia but outside of the limits of the city proper, and construct, maintain and operate on such lands, yard tracks, switches, roundhouses, shops, and other structures to adequately accommodate the handling, shifting, housing, storing, cleaning and repairing of the locomotives and cars of such companies as shall be entitled to use the said passenger station and terminal." Special provision was made for a freight-delivery yard and terminal for the Baltimore and Ohio Railroad Company outside of the location set aside for the Union passenger terminal. The streets that would interfere with the general scheme were

[1] United States Statutes at Large, volume 32, part I, p. 909.

vacated and the commissioners of the District were authorized and directed to lay out a circle or plaza at the intersection of Massachusetts and Delaware avenues adjoining the station, and to lay out and open new streets leading to this plaza, making such changes in the line or grade of existing streets as might be "reasonably required, deemed necessary, or advisable" in the construction of the improvements authorized by the act. All damages to adjacent property owners arising from or connected with the changes in street grades, less in each particular case any benefits accruing to the property owner from the elimination of grade crossings or from the location of the station in the vicinity of his property, were to be borne by the District of Columbia and the United States, share and share alike.

The station and terminal property provided for in this act were to be subject to taxation the same as other property in the District, and all tracks and sidings were to be taxed as real esate, but it was stipulated that "no assessment, valuation, or tax shall be made, laid, or levied on the stations, terminals, and lines of railroad located, constructed, or maintained under the authority of this act in excess of that which would or could be lawfully made, laid, or levied if said stations, terminals, and lines of railroad were located, constructed, and maintained without the use of bridges, tunnels, viaducts, retaining walls, or other structures necessarily or properly employed to elevate or to depress the same as required by this act; it being the true intent and meaning hereof that the lines of railroad and terminals hereby authorized shall be assessed and valued for the purpose of taxation and taxed on the same basis as if the same were not constructed and maintained by means of such bridges, tunnels, viaducts, retaining walls and other structures." Portions of the terminal structure or viaduct used for storage or other commercial purposes, however, were to be excepted from the benefit of this rule.

The main passenger station and terminals were to be ready for occupancy within five years after the date of this act. The Philadelphia, Baltimore and Washington Railroad Company was to receive the sum of $1,500,000 from the United States in consideration of the surrender of its existing passenger station building, the removal of certain of its tracks

and the relinquishment of its right to use a portion of the Mall for a new passenger station and terminals.

This act also provided that any street or highway thereafter opened across any line of steam railroad within the District should be carried under the railroad by means of a subway or over it by means of a viaduct. The expense of the improvement within the limits of the railroad right of way was to be borne one-half by the railroad company and one half by the District and the United States, but the subsequent cost of maintenance was to be borne wholly by the public auhorities as in the case of public highways and the railroad company was to dedicate as a public thoroughfare the portion of any such new street lying within the limits of its right of way. The act prescribed that any railroad company then or thereafter lawfully existing and authorized to extend a line of railroad into the District, or having secured the right to operate over any other company's lines, to a connection with the tracks of the terminal company, should have the right to the joint use of the station and terminals upon payment of a reasonable compensation to be fixed, in the absence of agreement between the parties, by the supreme court of the District of Columbia.

Congress reserved the right to alter, amend or repeal this act.

480. The New York Central and New Haven terminals in New York City.—The right of the New York Central and Hudson River Railroad Company to bring its trains into the heart of New York City, using public streets on Manhattan Island for the purpose, is derived from legislative and local franchises granted from time to time since 1831. The original grants to the New York and Harlem Railroad Company, from which the New York Central leases the Grand Central station and the route of its main passenger line down Fourth avenue, have already been described in Chapter XXIV of this book in connection with the discussion of street railway franchises in Greater New York. In 1859, when the legislature finally effected a separation of the company's road into two parts, one the "city line" upon which horse cars were to be used, and the other the main line with its terminus at Forty-second street upon which steam cars could be operated, the company's charter and franchises, originally granted for

thirty years were extended for an additional period ending thirty years from the date of the extension. Subsequently, the legislature passed a general act authorizing railroad companies having limited charters to extend them by following a prescribed procedure prior to the expiration of the original period for which the charters were granted. No limit was placed upon the period for which a company could extend its own charter, and the law prescribed that after such an extension the company should continue to enjoy the same rights and privileges which it had before. In 1874 the people of New York adopted a constitutional amendment effective January 1, 1875, prohibiting the legislature from passing any law authorizing the use of the public streets for railroad purposes without the consent of the local authorities and without the consent of the property owners or in lieu of that the consent of the general term of the supreme court. On December 28, 1874, the New York and Harlem Railroad Company, fifteen years before the date when its existing charter rights would expire but only four days before this constitutional amendment would go into effect, filed a certificate in the office of the Secretary of State extending its own corporate life and franchises for the goodly period of 500 years from April 16, 1889. Thus it was that practically perpetual rights in Fourth avenue to the Grand Central terminal were secured. The original grants for the freight railroad skirting the east bank of the Hudson river from the north end of Manhattan Island to Sixty-first street, and thence continuing through Eleventh avenue, Tenth avenue, West street, Canal street and Hudson street to the down-town freight terminal yard of the New York Central lines at Beach street, date from 1846, 1847 and 1849, when the Hudson River Railroad Company was incorporated for a period of fifty years [1] and received a local franchise authorizing it to occupy the streets just enumerated.[2] The Hudson River Railroad Company was consolidated in 1869 with the New York Central Railroad Company to form the present New York Central and Hudson River Railroad Company with a charter for a period of 500 years. Accordingly, the

[1] Laws of New York, 1846, chapter 216.

[2] Ordinance approved May 6, 1847, and resolution approved September 25, 1849 *See* "Ferry Leases and Railroad Grants, New York, 1866," compiled by D. T. Valentine, pp. 305, 311.

present company claims to have added nearly 500 years to the life of the original Hudson River Railroad franchise. For several years the people of New York have been trying by various legislative measures and judicial proceedings to get the New York Central tracks removed from the surface of the streets. It is something of an anomaly to see long freight trains creeping down the center of one of the principal avenues of New York, flanked on either side by swarming tenement houses. Eleventh avenue has been renamed in newspaper and popular terminology "Death avenue," but the railroad tracks are still in the street and probably will not be removed until some vast scheme of terminal improvement involving either an elevated or a subway freight railroad reaching to the lower part of Manhattan Island has been agreed upon. The practical question now at issue in the courts is this: Who shall pay the cost of the New York Central's getting off the surface of these streets?

The viaduct, tunnel and open cut in Fourth avenue by which the New York Central reaches the Grand Central station have been provided for by special acts of the legislature passed from time to time, and the electrification of the company's main lines within the city limits and the enlargement and reconstruction of the Forty-second street terminals have been undertaken in accordance with other legislative acts and under the terms of certain contracts between the city and the companies concerned. The principal act relating to electrification and changes in the terminals became a law May 7, 1903, with the acceptance of the city.[1] This act required the companies to depress their terminal tracks between Fifty-seventh street on the north, Lexington avenue on the east, Forty-second street on the south and Madison avenue on the west to such grade as would enable the city to carry the cross streets, from Forty-fifth to Forty-ninth inclusive, across the railroad tracks by suitable viaducts or bridges at a grade or grades not exceeding four per cent, and to carry the streets north of Forty-ninth across at normal grade. The companies were authorized to change or reconstruct their terminal buildings and tracks so as to enable them to operate their trains by some motive power other than steam and the use of steam in Fourth or Park

[1] Laws of New York, 1903, chapter 425.

avenue south of the Harlem river after the expiration of five years from the time of the approval of the companies' plans by the local authorities was prohibited, except temporarily in emergencies. The companies were authorized to use electricity, compressed air or other motive power not involving combustion in the motors themselves. The city was authorized to grant to the companies the use of the sub-surface of the portions of streets lying within the limits of the proposed terminal, but not to grant the companies a fee in the land. It was expressly stipulated that the city should not be deprived of the right to use or to permit others to use the soil of these streets underneath the companies' tracks "in any manner which shall not interfere with or endanger the occupation or use" by the companies themselves. The New York Central and Hudson River Railroad Company, as the operating corporation, was required to prepare plans and profiles of all the improvements affecting public rights in the streets for submission to the board of estimate and apportionment of the city for its approval. When the plans were approved by this board, all alterations or changes in grades, width, uses or otherwise of any streets, avenues or public places shown on the plans were to be deemed as having been duly authorized, and all interests or easements in lands owned by the companies so far as reasonably required for the construction of the proposed street viaducts over the tracks were to be deemed vested in the city of New York. All work in connection with the construction of the viaducts was to be performed by the New York Central company as contractor for the city, and the city was to contribute $600,000 toward the expense of the transverse viaducts from Forty-fifth street to Fifty-sixth street inclusive. These viaducts were to be fifty feet wide, but by paying the extra cost the city was authorized to require the construction of the Forty-fifth street bridge of a width not exceeding seventy feet. The city was also to pay the entire cost of the longitudinal viaduct carrying the central portion of Park avenue over the tracks from Forty-ninth street to Forty-fifth street. The companies were to pay the city $25,000 a year for the privileges granted, plus a sum to be agreed upon for any lands, rights, interests or easements in lands granted to the companies in perpetuity or for such shorter time as might be required. All sewers, water pipes, gas pipes, electric lines, wires,

ducts or conduits in any of the streets affected by the proposed terminal improvements were to be changed or relocated at the expense of the railroad companies, in any manner required but subject to the approval of the board of estimate. It was expressly provided that nothing in this act should have the effect of limiting or impairing any of the existing rights, privileges or franchises of the companies except as they were specifically modified by the terms of the act.

By the terms of the "Grant and Agreement" executed between the city on the one side and the New York and Harlem Railroad Company and its lessee, the New York Central and Hudson River Railroad Company, on the other, dated June 19, 1903, the city reserved the right "at all times to inspect all work performed and materials furnished under this agreement, and also to inspect the manufacture and preparation of such materials." The operating company was to maintain the traffic on the streets as far as practicable during the progress of the work, to take all necessary precautions to prevent accidents, and to indemnify the city for all damages to persons or property for which the company was responsible.

By a subsequent agreement, dated April 28, 1905, the city granted certain additional rights to the companies including the fee of portions of Forty-fourth street and Depew place for $355,000, and the right to occupy the subsurface of certain other streets for an annual rental of $10,000. It was provided, however, that of this rental the sum of $7,325 for the use of specified portions of streets should be subject to readjustment at the end of each twenty-year period on the basis of changes in value of the land fronting on the portion of Vanderbilt avenue between Forty-second and Forty-fifth streets so that the same ratio of the rental to such value should be re-established at the beginning of each new period. The value of the land in question at the date of this contract was agreed upon as being $61,041 per city lot of 25 feet front and 100 feet depth.

The right of the New York, New Haven and Hartford Railroad Company to use the New York Central tracks in Park avenue is based upon an original agreement, dated March 17, 1848, between the New York and Harlem Railroad Company and the New York and New Haven Railroad Company by which the latter secured the right to use the former's

tracks all the way south from Williams Bridge, now Woodlawn Junction, near the present northern boundary of the city, to Pearl street. Under this famous agreement the New Haven company bound itself to pay to the Harlem company a certain amount per passenger transported over the Harlem lines in New Haven trains. This amount ranged from 14 cents per passenger in case not more than 1000 passengers a day were carried, to 6 cents per passenger in case the number was in excess of 4000 a day. It was agreed that the New Haven company should not charge less than 25 cents from any point near the Harlem railroad so as to interfere with the Harlem company's local fare of 25 cents from the point of junction of the two roads at Williams Bridge to the city terminal, and the New Haven company agreed not to take any way passengers between those points. But if the Harlem company voluntarily reduced its rate the New Haven company would have the right to follow suit. The track rental to be paid by the New Haven company on account of its receipts "for the transportation of mails, express trunks, crates and packages, and for goods, wares, produce and merchandise generally," was to be fixed on the principle of dividing the net profits, over and above terminal and transportation charges, between the two companies in proportion to the mileage on the two roads over which the goods were carried. This trackage agreement was to continue for the full period of the companies' corporate existence, but was subject to the right of either company, after the expiration of three years from the actual beginning of such joint use of the Harlem company's tracks, and after twelve months' written notice to the other party, to terminate the compensation features of the contract and require a readjustment of the rental either by agreement or by arbitration. Thereafter, a new adjustment could be demanded by either party not oftener than once in five years. As a matter of fact the rental paid by the New Haven company under this contract has been readjusted twice, once in 1856 and again in 1861. In both cases the companies resorted to arbitration. The award of 1861, which appears to be still in force so far as passenger traffic is concerned fixed the rental to be paid by the New Haven company at 13 cents "for each full-priced passenger," and 4 1-3 cents "for each commuting passenger," and for freight and express

traffic a proportion of 40 per cent of the gross receipts on account of such traffic. The exact proportion was to be determined according to mileage. Sixty per cent of the gross receipts for carrying freight, express matter and the mails was fixed as the amount to be retained by the New Haven company for station, motive power and other expenses. The toll levied on the New Haven company's through passenger traffic was based on the rates then being charged by the company and was subject to reduction or increase in proportion to any reduction or increase in such rates, but no reduction was to be made except with the concurrence of the presidents of the two companies or by decision of an arbiter.

The New Haven company's share in the expense involved in the construction and maintenance of the new terminal at Forty-second street is fixed by an agreement between the companies concerned, dated July 24, 1907. In general this contract grants to the New Haven company the right to use the Grand Central station terminal facilities to a maximum of 50 per cent of their capacity, and requires the New Haven company to pay, of the total expense for maintenance, taxes, interest on cost of construction figured at 4 1-4 per cent per annum and annual payments to the city, a proportion determined according to the actual proportionate use of the terminal. It is an open secret that the New Haven company wishes it had a separate terminal of its own. In taking its pound of flesh, the New York Central also draws a little blood, thanks to charter and franchise rights that leave the fixing of the terms of joint use of one of the greatest terminals in the world to the liberality of the company which got there first.

481. The Pennsylvania tunnels and terminals in New York City.—There is no better illustration of the immense cost of securing entirely new terminal facilities in the heart of a great city than is afforded by the expenditures of the Pennsylvania Railroad in the construction of the tunnels under the Hudson river, across the island of Manhattan and under the East river and the building of the immense terminal station in the center of Manhattan and the great "Sunnyside Yard" in Queens. The franchise for the tunnels and the passenger station was granted by the board of rapid transit railroad

commissioners of New York City, October 9, 1902, to the Pennsylvania, New York and Long Island Railroad Company, a subsidiary of the Pennsylvania Railroad Company. This grant authorized the construction of a railway including two tracks from a point on the New Jersey line easterly under the Hudson river, the city's dock property, Thirty-first street, the East river and certain private property to a point in Long Island City in the borough of Queens, where the railway would emerge from the ground and enter the Sunnyside Yard to a connection with the Long Island Railroad. Another two track railway substantially parallel to the route just described and crossing Manhattan under Thirty-second street was also authorized. A third line with two tracks extending from the passenger terminal under Thirty-third street and the East river was authorized as well as two additional tracks westward under Thirty-second street from the terminal, and one additional track eastward from the terminal to Fifth avenue under Thirty-second street and another under Thirty-third street. The terminal itself was to occupy the four blocks between Seventh and Ninth avenues and Thirty-first and Thirty-third streets, and the company was authorized to occupy as much of the underground space in the streets bounding the terminal and passing through it as was desired.

The privilege of maintaining a station under Thirty-third street at Fourth avenue at the intersection of the company's route with the city's subway was also granted, but the value of this privilege was practically reduced to nothing by another paragraph of the grant which forbade the company to carry on merely local traffic without first securing the further consent of the local authorities and paying an additional consideration for the privilege. "Local traffic" was defined as including "the carriage of passengers or freight between the terminal station of the Tunnel Company and any point in the City of New York within five miles of said terminal station, or between stations within said limits." The company was authorized to operate on its railways motors, cars and carriages for the transportation of persons and property and to maintain and operate "telegraph wires and wires, cables, conduits, ducts, and ways for the distribution of power, heat and light, and other appurtenances for use of the Railroad." The company might also acquire and use private property

"for stations, station extensions, power plants, pumping stations, shafts for access to the surface and other necessary purposes of the Railroad." All these rights were granted in perpetuity. The grant would be void, however, unless the company acquired within one year after the acceptance of the franchise the consents of the owners of one-half in value of the property abutting on the streets under which the railroad was to be constructed, or in lieu of that, the permission of the proper court to build the road, but the time for obtaining consents might be extended within certain limits by the rapid transit board. After consents had been obtained, the company was to begin work within three months and have the railroad ready for operation within five years from the date of such commencement. The company was to have ten years, however, in which to construct the tunnel under Thirty-first street, and might, indeed, on giving one year's written notice to the rapid transit board before the expiration of the ten-year period relinquish entirely the right to build it. In case the company failed to commence or complete the railroad within the periods required including extensions of time granted by the board or resulting from necessary delays caused by injunctions or condemnation proceedings, the rapid transit board could, after giving three months' written notice to the company, annul the franchise as to any part of the railroad not then completed and in operation.

The city later sold to the company those portions of Thirty-second street lying between Seventh and Eighth, Eighth and Ninth, and Ninth and Tenth avenues in two parcels for $1,188,600. For the portions of its route crossing under the Hudson and East rivers, the company agreed to pay the city $100 a year for each river, and for the right to construct its railways under the docks and bulk-heads and under streets in Manhattan 50 cents a year per linear foot of track laid for the first ten years of operation and one dollar per foot for the next fifteen years. For portions of the route under streets in Queens, payment was to be made at one-half the rates just described. For the use of the underground spaces in Thirty-first and Thirty-third streets adjoining the terminal the company was to pay a rental of $14,000 a year for the first ten years and twice that amount for the next fifteen. These rentals were subject to readjustment at inter-

vals of twenty-five years either by agreement or by court decision.

The company was authorized to construct its railway under each street in one or more tunnels as it might find "most advantageous." In general the tunnels under the streets were not to approach within five feet of the property lines except where the company was the abutting owner, and the uppermost part of any tunnel was to be at least nineteen feet below the surface of the streets except in and about the terminals. The company was required to take care of all underground structures during the period of construction and was required to make good all damages done by its operations to the property of abutting owners. Excavations except in and about the terminal station were to be made without disturbance of the surface of the street wherever possible. The company's tracks were to be "constructed of the most approved plan so as to avoid noise and tremor." All plans and the method of doing the work from time to time were to be subject to the approval of the rapid transit board. The road was to be operated by electricity or other motive power not involving combustion in the tunnels and approved by the board. The city was to have a lien upon the company's franchise and realty under the rivers, streets and avenues to secure the payment of the stipulated compensation and rentals. The company bound itself to consent to the construction of any future rapid transit railroad over, along or under any portion of any street occupied by the company's tracks so long as the new road would not actually interfere with the company's structure. The city reserved the right to inspect the company's railroad at any time and to use the tunnels for police and fire, telegraph and telephone wires, "to such extent as is not inconsistent with the purposes of this franchise." The company was bound to maintain and strengthen from time to time all parts of the railroad under any street or avenue so as safely to support any structure superimposed upon the street by the city or under its authority.

Subsequently, in 1906, the tunnel company petitioned the board of estimate and apportionment to close certain streets near the terminus of its railroad in the borough of Queens in order to leave the ground clear for the establishment of "a large terminal yard upon the surface for the storage, repair,

cleaning and ventilation of its cars, for the switching, turning and making up of its trains and cars, and for the other purposes necessary to the efficient operation of a trunk line railroad which cannot be carried out in the confined limits of the passenger station in Manhattan Borough." The company explained that "such proposed terminal yard should be as accessible to its passenger terminal station as possible," but that "such a yard is not possible in the Borough of Manhattan for several reasons, and among them, the prohibitive cost and the impossibility of securing the closing of streets on the route of the railroad." The tract of land selected for "Sunnyside Yard," as this terminal was to be called, was an area of about 150 acres almost wholly unimproved and largely made up of low and swampy land lying diagonally athwart the eastern approach to the great Queensboro bridge that now connects Manhattan and Queens at Fifty-ninth street. The company's petition was granted and an agreement between the city, the tunnel company and the Long Island Railroad Company was entered into on June 21st, 1907, providing for the closing of a large number of streets by the city and the construction of five viaducts by the companies to carry the principal thoroughfares over the big yard. Two additional viaducts over the yard were to be constructed, if at all, at the joint expense of the city and the companies. The city reserved the right to maintain the sewers and other underground structures under the yard in the line of the streets that were closed.

482. Freight railroad franchises in New York City.—As a city increases in population, the necessity for a clear-cut separation between the terminal facilities for handling passengers and those for handling freight becomes apparent. The movement of frequent passenger trains in and out of the city makes the use of the same tracks for freight trains impracticable. The pressure for space at the passenger terminal drives the freight business elsewhere. In some instances not only separate tracks and separate stations are provided, but separate railroads and even separate companies come into existence to handle freight terminal traffic. A good illustration of this tendency is seen in the organization of the New York Connecting Railroad Company as a subsidiary of the Pennsylvania and the New Haven railroad companies to build a

through freight line extending from a connection with the New Haven lines in The Bronx across the East river at Hell Gate by an immense bridge into the borough of Queens there to connect with the Long Island Railroad system and the Pennsylvania tunnels. The franchise for this connecting railroad was granted under the rapid transit law, February 14, 1907. The company had already acquired from the state legislature the necessary grant for the construction of the Hell Gate bridge.[1] The company's rapid transit franchise was for a route over a private right of way crossing all intersecting streets either above or below grade. The construction of four main tracks, and sidings equal to 40 per cent of the total length of the main line, was authorized. The entire structure of the railroad, including sidings, cuttings and embankments, was limited to a width of 100 feet at street crossings. The company was authorized to maintain telegraph wires and cables, wires, conduits, ducts and ways for the distribution of power, heat and light, and "other appurtenances for the use of the new railroad, but for no other purpose." The grant was perpetual, conditioned upon the company's getting the consent of the board of estimate, the mayor, and the property owners or the court. The company was required to pay the city $110,000 within sixty days after the requisite consents had been obtained, and annual payments amounting to $27,500 a year for ten years from the commencement of operation and $55,000 a year for the next fifteen years, these payments to be for the right to cross streets and other public property. For the right to cross the East river an annual charge of $100 was made, and for the right to occupy permanently for abutments, piers and supports certain portions of ground on Ward's Island and Randall's Island and to use the overhead space above these islands for the superstructure of the bridge, a reasonable annual payment to be agreed upon or to be prescribed by the sinking fund commission of the city. In case of payments prescribed by the commission being considered unreasonable, the company was to have the right to recover by suit any excess over what was reasonable. The rates of payment for the franchise were to be readjusted once every quarter of a century by agreement or by judicial proceedings. Where the grade of any

[1] Laws of New York, 1900, chapter 752.

street was raised or depressed at a crossing of the railroad the maximum grade to be permitted on the approaches was fixed at four per cent. Viaducts or bridges over streets were to leave a clearance of from 14 to 16 feet, and where streets were carried over the railroad the clearance was to be at least 20 feet. Where the railroad passed under a street by tunnel, the exterior surface of the arch of the tunnel was to be separated by not less than four feet from the grade of the surface of the street. Any superstructure of the railroad crossing a street and having a length of not more than 75 feet was to be constructed in a single span. If longer than 75 feet, the structure might be supported by intermediate columns placed in the street "if and when" duly approved by the board and any necessary local authority. All bridges over streets were to be water-tight. The road-bed except on the bridge connecting Queens with The Bronx was to be "baliasted throughout its entire length with a sufficient quantity of either blast furnace slag or broken trap rock of a hard and durable quality," and no dirt, sand, gravel or cinders were to be used for ballast. The company was required to make all permanent or temporary readjustments of underground or overground structures at its own expense, subject to municipal regulation. The use of the company's structures or property, other than the interior of its stations, offices or storerooms, "for advertising purposes in any way" except for time-tables and other notices concerning the operation of the railroad was prohibited under penalty of $50 a day for each offense. The company was required to observe all reasonable regulations prescribed by any lawful authority "tending to prevent the throwing, deposit or dropping of noxious or offensive objects, substances or things" from the portion of the railroad crossing public property. All plans for construction work were made subject to the approval of the rapid transit board, and plans for the East river bridge and the company's stations were to be submitted to the municipal art commission, unless the approval of that commission was dispensed with by consent of the mayor and the board of estimate. The city reserved the right to install for its own exclusive use on the bridge structure, police, fire alarm, telephone and telegraph wires to a reasonable extent. The locations of the company's terminal and other yards or stations and all storage tracks

were to be subject to approval by the board of estimate. The motive power to be used on the railroad was to be steam with the right reserved to the company to substitute electricity. It was provided that "if the Railroad Company shall use steam and if, by reason of increased density of population along the line of the new railroad, such use of steam shall constitute a nuisance or be dangerous to the residents along the route, or materially depreciate the value of property along the route, then the Board may notify the Railroad Company that the public interests require a change to electricity or such other motive power not less convenient to the public, as may be prescribed by the Board and approved by the Railroad Company." The change would have to be made within three years unless the company notified the board within ninety days that it would not obey the order, or failed to give any notice either way. In case of the company's refusal or neglect to obey the order the board would have the right to apply to the supreme court for a writ of mandamus or other proper remedy to compel obedience. The only issues on such application were to be as to whether the use of steam on the railroad did in fact constitute a nuisance, was dangerous to the residents along the route or did materially depreciate the value of property in the vicinity "to such an extent that the public necessity for the change of motive power by reason thereof is such that the Railroad Company should make the change." A decision against steam on any one of these issues would be conclusive and binding upon the company.

The company was required to bear the entire expense of preserving from injury and from interference with traffic all the streets already opened across the route of the railroad. Provision was also expressly made for the opening of certain other enumerated streets, the company being bound at the time of such opening to convey to the city the lands included in the railroad right of way within the lines of such new streets, subject only to the company's easement. It was further stipulated that the city should have the right to open across the route "any new streets whatever in addition to those" specifically mentioned, whenever the board of estimate should certify "that a public necessity exists therefor." If the company denied the existence of the alleged public necessity the issue was to be threshed out in court, and if the

company won it would not be required to permit the street opening to be carried through without a claim for damages and would not have to cede to the city without charge the land owned by it within the proposed street lines. In all cases where the company was required to convey such land free of cost for street purposes, the company would also be required to "bear and pay the cost of regulating, grading and paving the street so opened within such right of way," including (a) the cost of actual construction within the limits of the right of way; (b) the cost of bridges and their abutments and supports, within the street lines, whether the bridges were used for carrying the railroad over the streets or *vice versa;* (c) the cost of raising or depressing the grades of any such streets, and (d) the resulting damages to abutters. If any street should be widened after the construction of the railroad so as to require the alteration of the superstructure, the company and the city were each to pay one-half the cost of such alteration.

It was declared to be understood "that the intention of the Railroad Company is to use the new railroad principally for the carriage of property," but the right to transport passengers also was granted, with the proviso that the company should not carry on merely local passenger traffic without first securing the right to do so from the local authorities subject to such additional conditions and the payment of such additional compensation as might be prescribed by them. "Local traffic" was defined as including "the carriage of passengers between any two points within the limits of the present City of New York, except as the same may be incidental to the carriage or transference of passengers travelling to and from points beyond the limits of the city, or incidental to the operation of the railroad." It was expressly stipulated that this franchise should not interfere with the city's right to authorize the construction or operation of any other railroad which would not physically interfere with the structure, maintenance or operation of the road to be constructed under this grant.

Another type of freight road is that constructed by the Bush Terminal Railroad Company under a franchise from the city of New York, dated February 14, 1905. This railroad company was organized by the Bush Terminal Company as a

subsidiary corporation to operate the Terminal company's tracks. This grant was in general accordance with the standard form of street railway franchises used in New York City in recent years. Indeed, provision was made for passenger traffic at a two-cent fare on the company's lines and a combined fare of five cents to reach Coney Island in one direction and the Brooklyn borough hall or the borough of Manhattan in the other. The character of the road as being primarily a freight road comes to light in a provision of the franchise to the effect that "the number of freight cars in any train operated by the railway shall be limited to seven (7), including the motor car, and the speed of such motors or trains shall not exceed six (6) miles per hour." It was also stipulated that "no motors or cars shall be permitted to remain stationary within the lines of any street, avenue or highway, whether on the main track or any spur, and no freight shall be loaded upon or unloaded from such cars while within the lines of any such street." In addition to the usual percentages of gross receipts from passenger traffic payable to the city, the company was required to pay annually for ten years the sum of fifteen cents per linear foot of single track laid in the streets and thirty cents per foot annually thereafter until the readjustment of the compensation at the end of the original twenty-five-year period of the grant.

483. A tunnel terminal for an electric railroad to be constructed under a forty-year franchise—Boston.—By an act approved June 15, 1910, the Massachusetts legislature made provision for the entrance of the Boston and Eastern Electric Railroad Company into the central business district of Boston by means of a tunnel under the harbor from some point in East Boston.[1] The tunnel was to be built by the company at its own expense and deeded to the city when completed, subject to the company's right to use it for a period of forty years. At the end of that time possession of the tunnel was to be surrendered to the city and all property within the tunnel not an integral part of the structure itself might be removed by the company unless the city chose to take it over at its fair value as determined by agreement or arbitration. It was provided, however, that in case the tunnel should be substantially destroyed by the act of God at any time during the

[1] Massachusetts Acts of 1910, chapter 680.

forty-year franchise period the company would be under no obligation to rebuild it. The joint use of the tunnel might be granted by the board of railroad commissioners to any railroad, electric railroad or street railway corporation on such terms and conditions and for such compensation as the board might fix after a hearing, and the grantee under this franchise was bound to permit a physical connection with the road of any such other company. This privilege of joint use was specifically extended to the Boston Elevated Railway Company. The grantee was authorized to place and maintain in the tunnel, booths for the sale of newspapers, periodicals and books and to permit unobjectionable advertisements, and might "make such other use of the tunnel not impairing the use for transportation of passengers as the board may from time to time approve." But whenever, in the judgment of the board, such additional use diminished or impaired in any way the safety, accommodation, convenience or comfort of the passengers or conflicted with the best interests of the public, the board might require such uses to be curtailed or entirely stopped. The company was to pay the city annually a sum equal to the tax which, at the current rate, would have been laid upon property in the city assessed at a valuation equal to the estimated cost of the portion of the tunnel not under the waters of the harbor. The general character, size, design and location of the tunnel were to be fixed by the Boston transit commission and the Massachusetts board of railroad commissioners acting jointly, and this joint board in locating the tunnel was to have due regard to the requirements of a tunnel connection between the north and south stations of the steam railroads entering Boston. This act was not to be construed as a declaration on the part of the legislature that public necessity and convenience required the construction of the company's road, and all the privileges granted were to be contingent upon the company's securing from the railroad commission a "certificate of exigency" as required by the general law of the state governing "electric railroads" as distinguished from general railroads and street railways. In acquiring easements in real estate required in connection with the building of the tunnel, the company was authorized to confine its taking or purchase in connection with any particular parcel "to a portion or section of such parcel fixed by hori-

zontal, vertical or inclined planes of division or curved surfaces, or otherwise, below, above or at the surface of the soil." The city reserved the right to place in the tunnel wires and other apparatus used exclusively for the police and fire alarm service, and the company was authorized to rent out space in the tunnel for the wires, conduits, tubes or similar structures of other companies, not including, however, gas, sewer or water pipes.

No one familiar with the facts in both cases can fail to note the marked contrast between the forty-year tunnel and terminal franchise granted by the state of Massachusetts and the perpetual Pennsylvania tunnel and terminal franchise described in a preceding section granted by the city of New York.

484. Union passenger station and other terminal facilities for joint use—Memphis.—The Memphis Railroad Terminal Company, on October 19, 1908, secured from the legislative council of Memphis an ordinance authorizing the company to construct, operate and maintain within the city limits "passenger stations, comprising passenger depots, office buildings, sheds, storage yards, roundhouses and machine shops; also such main and sidetracks, switches, crossovers, turnouts and other terminal railroad facilities, appurtenances and accommodations, suitable in size, location and manner of construction to perform promptly and efficiently the work of receiving, delivering, transferring and removing all passengers and passenger traffic of the railroad companies with which it may enter into contracts, for the use of said terminal facilities."[1] Specific provision was made for grade, overgrade or undergrade crossings, or for the closing of streets, at twenty different points. It was stipulated that "any commercial railroad incorporated under the general railroad law of Tennessee, and owning not less than one hundred (100) miles of road contiguous to Memphis, and which shall have built into the city of Memphis and acquired and constructed its tracks to a connection with the tracks of the Terminal Company, shall be permitted by the Terminal Company to use the station upon terms that will be just and equitable; *provided*, that in no event shall such new road be admitted upon more favorable

[1] Hughey's Digest, *already cited*, p. 911.

terms than have been enjoyed up to that time by any of the proprietary railroad companies." It was expressly provided that so far as the Terminal company's trains and tracks were concerned except at the two grade crossings permitted under the franchise, the city's ordinances "relating to the speed of railway trains, the number of cars to constitute a train, the ringing of locomotive bells, the use of train or engine lights, the sounding of signals before starting trains, and the maintenance of gates, flagmen, watchmen, signals and signal towers," should not apply. This provision points clearly to the difference in the relation between steam railroads and the city authorities before and after the elimination of grade crossings. The franchise of the company prohibited it from granting to any person or corporation "any exclusive right to any portion of the plaza or approach to the Union station, outside of its buildings," and all persons were to have equal rights and privileges to be exercised subject to reasonable rules prescribed by the Terminal company. All subways, where streets were carried under-grade, were to be "drained by laying drain pipes of sufficient capacity to carry and grade to insure positive drainage of such depressions."

485. Union depot franchise terminable after 20 years, Richmond, Virginia; minimum cost of depot stipulated, Salt Lake City; discrimination in rates forbidden, Newport, Kentucky.—An ordinance of Richmond, Va., passed in 1885, closed certain streets for a period of twenty years and authorized two certain railroad companies to use the space thus gained for the erection of suitable passenger and freight depots.[1] It was stipulated that the two original companies and all companies subsequently acquiring an interest in the depots should allow any other company desiring to enter the depots, or to deliver freight or passengers there, to do so on fair and reasonable terms. It was further stipulated that after the expiration of the twenty-year period covered by this grant "the owners of said depots are not to be deprived of the privileges above granted, except by an ordinance or resolution, passed by two successively elected councils, requiring the re-opening of said streets." If such action should be taken, the companies were to be allowed twelve months after the resolution or ordinance had been finally passed in which

[1] Franchises granted by the City Council, *already cited*, p 23.

to remove their depots, tracks and other obstructions in the streets so to be opened.

On March 10, 1900, the city council of Salt Lake City passed an ordinance granting to certain individuals the right to use a portion of a street in the construction of "a union passenger railway and depot with the approaches and accessories required."[1] The grantees were also authorized to construct and operate in a certain street a railroad "with as many main, side, switch and connecting tracks as may be required for ingress and egress of trains to and from said union passenger depot and for the convenient use and accommodation thereof." The depot when built and fully equipped was to cost not less than $200,000, and construction was to be commenced within three months from the acceptance of the franchise and completed within two years after commencement. This franchise was granted for a term of fifty years, and it was stipulated that "other railroad companies wishing to have access to and enjoy the privilege of said union depot as a passenger depot shall be permitted to do so upon such terms as may be just and equitable."

In granting to the Elizabethtown, Lexington and Big Sandy Railroad Company a right of way through town for the construction of a double-track railroad and for the erection and operation of telegraph lines to connect with the company's offices, buildings or depots, the city of Newport, Ky., by ordinance passed November 11, 1886, forbade the company to discriminate against Newport in passenger or freight rates and required it to conform its Newport rates to the rates to or from Cincinnati and Covington.[2] The company was required, "immediately upon the completion of its road," to "provide and maintain within the city suitable separate depots for freight and passengers, and make convenient and proper provision to meet the wants of the travelling public and commercial business of the city." Whenever required by the city, the company was to "provide and maintain gates or watchmen at all crossings or grades" and no train was to be run through the city "unless the bell thereon is kept constantly ringing," and no cars were to be allowed to remain in any street "except when being loaded or unloaded." No

[1] Book of Ordinances, *already cited*, p. 562.
[2] Special Ordinances, *already cited*, p. 388.

"running switch" was to be made within the city limits, and no car or train was to be backed "without having a watchman at the front thereof."

486. A 200-year belt railway and union passenger station franchise; separation of grades; construction of switch tracks required; charges to be reasonable.—Kansas City, Missouri.—One of the most comprehensive and elaborate terminal franchises on record in this country is contained in an ordinance of Kansas City, Missouri, approved July 7, 1909, and subsequently ratified by the voters at a special election. This great terminal scheme included the vacation of many streets, the elimination of many grade crossings, the construction of a four and six track belt railroad for the joint use of the various steam roads entering Kansas City and the erection of a magnificent union passenger station that was to cost at least $2,800,000 exclusive of ground and railroad tracks.

The Kansas City Terminal Railway Company, the beneficiary of this grant, was required to file with the city clerk, within ninety days after the acceptance of the franchise, the consents of the owners of "three-fourths of the front feet of the property fronting on the part of the public highways, streets, alleys, avenues or public places proposed to be vacated," and thereafter the city was to take the necessary legal steps to vacate them. If consents could not be obtained for all the proposed vacations within the time mentioned, the city agreed to go ahead with those for which consents had been obtained and the company was to have three years in which to secure the others. In all there were 102 proposed vacations of streets and alleys enumerated in the ordinance, but the city reserved the right to lay and maintain, and to permit others to lay and maintain, under the surface of the vacated areas, except where the union passenger station was constructed, sewers, tunnels, wires, water pipes, gas pipes, or pipes or conduits for any public purpose whatever.

The company was given the right for the full term of 200 years to construct, reconstruct, operate and maintain, on the line of the old Kansas City Belt Railway, six main tracks of railroad "together with such switches, side tracks, team tracks, connections, crossovers, switchstands, signals, signal wires, pipes for gas, air, oil and water, conduits, telegraph and telephone poles and wires as may be necessary or desirable,"

but the right of way was not to exceed 150 feet in width at any street crossing except at certain specified points. The company was also authorized to construct four main tracks along certain other routes described in the ordinance. The construction of a portion of the tracks was required within a specified time, and it was stipulated that the company should "from time to time construct and maintain all such tracks, authorized by this ordinance, as may be necessary to fully accommodate and take care of the traffic tendered to it."

The company agreed to reconstruct, when necessary, and maintain certain existing viaducts over its tracks and to construct, maintain and reconstruct certain other viaducts and subways for the passage of streets across its route. In general, the substructure of the viaducts was to be of stone, concrete or concrete and steel, and the superstructure was to be of steel or steel and concrete, with the roadways and sidewalks carried on brick or concrete arches or on concrete slabs reinforced with steel bars. The approaches were to be of steel, stone, concrete or steel and concrete filled with earth where retaining walls were used. The grades of the streets at crossings were fixed in the ordinance itself. All viaducts and approaches were to be provided with sidewalks for foot passengers uniform in width with the sidewalks on the connecting streets, unless otherwise provided in the ordinance or otherwise ordered by the city board having supervision of construction. For park and boulevard crossings this board was to be the board of park commissioners, and for other crossings, the board of public works. All viaducts were to be of sufficient strength to support street car traffic. The structure of the viaducts, wherever more than seven feet in height in the clear, was to be of the "open viaduct" type so as to allow, as far as possible, "the use of the streets under the approaches by the public for general traffic purposes." Generally, subways under the company's tracks were to be of the full width of the connecting streets, and the company was authorized to place supporting pillars at the curb lines, or if the distance between curbs was more than 40 feet measured along the center line of the company's route, then columns might be placed in the roadway. The entire original cost of construction of subways and their approaches was to be paid by the company, but only that part of each

subway, including the concrete base, curbing and wearing surface of the roadway and the sidewalks, extending to the full width of its right of way was to be maintained at the company's expense. The city agreed not to open any new streets across the company's tracks at grade, and the company agreed to pay the cost of additional viaducts and subways when required for new streets. But if in a proceeding brought by the city to recover the cost of any such improvement, the court should hold that the crossing was not reasonably necessary to provide for public traffic at the time of construction, the city would not be able to recover the cost. It might, however, at some subsequent time, when the crossing became necessary in the opinion of the court, recover the reasonable value at that time of the subway or viaduct, and thereafter the structure would be maintained at the company's expense. Complete plans and specifications for all crossing-structures required by the ordinance were to be submitted by the company for the approval of the proper city authorities. The city agreed not to change the grade of any street over a viaduct or of the company's tracks under a viaduct so as to require a clearance of less than twenty-three feet, except with the company's consent. The clearance in subways, except at a few specified points, was to be not less than thirteen feet from the surface of the roadway to the overhead structure, and in subways where surface street railway lines were operated, not less than fourteen feet and two inches.

The union passenger station was to be completed ready for service within four years after the necessary vacations of streets had been made, unless the work on the station should be delayed "by adversary legal proceedings, by the fact that suitable material is not obtainable, by strikes or other labor trouble, or by other unavoidable cause or causes not now anticipated." This station was to contain "adequate facilities for the handling of passengers and baggage, including necessary space and track room for the prompt handling of trains and suitable accommodations for incoming and outgoing passengers for all lines of railroad operating in Kansas City." Subject to certain conditions specified in the ordinance, the company was bound to admit all railway companies operating into Kansas City to the joint use of the station and the tracks leading to it for their passenger trains. Every company

using the union station was required to agree to operate all of its passenger trains, except suburban trains, into this station. Compensation for the use of the station and terminal tracks was to be fixed by agreement or by decree of a court of competent jurisdiction. All rules and regulations put in force by the Terminal company governing the use of the station tracks and other facilities were to be, so far as practicable, uniform and to "apply alike, without discrimination, to all railroads using or desiring to use the same." Certain of the Terminal company's main tracks were to be open for the joint use of all the railroad companies for the operation of their freight trains.

The company agreed to acquire and dedicate to the city for highway purposes certain enumerated parcels of land, reserving the right to maintain across such parcels at the established grade certain tracks for switching purposes to serve industries located in the vicinity. The company was bound to keep all these grade crossings for switching purposes in good repair so that they would be safe for public travel. It was stipulated that "the ties shall be cut off square at both ends eighteen (18) inches from the rails, and the spaces between the rails shall be planked with white oak or other wood satisfactory to the City Engineer four (4) inches thick in such manner that the top of the plank shall be level with the top of the rails." Whenever the street was paved, the company was to pave, and repave when necessary, between the rails and eighteen inches on either side. In case the grade of a street was changed the company was to change its switch tracks to correspond with the new grade. The city was to be indemnified against any damages resulting from the company's negligence in the construction, operation or maintenance of any of these switch tracks, and in case the use of any of them should be permanently discontinued, the company was to remove the abandoned ones and restore the streets.

In order to provide sufficient width for teams and wagons to turn around at the ends of alleys, or to provide entrances and exits where alleys were to be partially closed by the vacations provided for in this ordinance, the company was required to purchase and dedicate to the city for public use eighteen different parcels of land specifically described. The company agreed to make certain other public improvements,

including a number of sewers, described in the ordinance, and the city agreed to institute condemnation proceedings on behalf of the company in all cases where the company was unable otherwise to acquire at a reasonable price the parcels of land which it was bound under the terms of the ordinance to purchase or acquire.

The company agreed to construct and maintain during the life of the franchise "adequate freight sub-stations for the receipt and delivery of less than carload freight" at four specified points. These sub-stations were to be ready for operation as soon as the union passenger depot was completed, and the city reserved the right to require the construction after the expiration of five years of a fifth sub-station in the East Bottoms if the less than carload business in that locality should develop sufficiently to make this sub-station reasonably necessary. It was expressly stipulated that each of these sub-stations should be kept open to the public at reasonable hours, and should be equipped so as to handle with reasonable promptness "all incoming and outgoing less than carload freight consigned to or from the same over all lines of railroad entering Kansas City and using the tracks provided for in this ordinance for freight purposes."

The company was required to purchase and transfer to the city for a public park certain lands lying immediately south of the proposed union passenger station. It was stipulated that the city should grade this park property within a certain time and that "no street car line or lines shall be located, constructed or operated on said property, or any part thereof, nor shall any public carriage, omnibus or automobile stand be permitted thereon, without the consent of the Kansas City Terminal Railway Company; nor shall any buildings or other structures be located thereon, except such as are suitable for the use and ornamentation of said property for park purposes."

The city agreed not to grant a franchise to any street railway company to lay new tracks across the viaducts or through the subways to be constructed by the Terminal company without stipulating that the first street railway company acquiring such rights should repay to the Terminal company one-half of the cost of construction of any viaducts or subways so used, and should thereafter bear one-half of the cost of maintenance

imposed on the Terminal company under this ordinance. The Terminal company, upon the completion of any viaduct or subway, was required to file with the board of public works a copy of the contract, if any, covering the construction of the improvement, together with a detailed statement of its cost, including the cost of the approaches and the expense incurred on account of land damages. Copies of certain contracts between the Terminal company and the existing street railway companies for the use of viaducts and subways were to be filed with the city clerk before this ordinance was submitted to the electors for ratification, and so long as these contracts remained in force, they were to govern the use of the viaducts and subways by the companies concerned without regard to the general provisions of the ordinance as above set forth. It was further stipulated that these provisions should not apply to any suburban railway companies that might be permitted by the city to lay tracks on the viaducts or through the subways, but that in case of all such companies the compensation to be paid to the Terminal company should be a fair and reasonable sum to be fixed by the circuit court of Jackson county, Missouri.

The company bound itself to "do all practicable things, take all practicable measures and make all practicable changes in the construction, reconstruction and operation of its system, trains and property, within the city limits, as will in the most practicable way abolish unnecessary smoke, noise, dirt and other nuisances." The city reserved the right to use or permit other parties to use the viaducts constructed by the company, for carrying pipes, conduits or wires for any public purpose. The requirement contained in an old franchise of a predecessor company that a union freight station be maintained was abrogated, and in place of this obligation the company was required to maintain at some point between specified limits "an adequate system of team tracks for the receipt and delivery of freight in carload lots." The city was guaranteed the right to lay water mains, sewers and other pipes or conduits for public purposes across the company's right of way at a proper depth under the surface of the soil, and the company agreed to permit any other railroad or street railway company to cross its route by an overhead crossing with a clearance of not less than twenty-four feet or by an

under crossing with a clearance of not less than thirteen feet. The city agreed to sell certain lands to the company for $58,705, and to grant the company a right of way over certain park property, subject to the provision that whenever authorized to do so the city was to sell this land also to the company for $216,628.

This ordinance recited that "at the present time, and for several years, it has been the practice and custom of the various railway companies entering Kansas City, Missouri, to absorb switching charges upon competitive commodities handled to and from competitive points; and it has also been the practice and custom that the freight rates to freight substations have been and are no greater than the corresponding rates to the main freight stations of the various railway companies." It was declared to be "the intention and purpose of the parties to this agreement that neither the making of the same, nor the conditions that result from the making of the same, nor acts done thereunder shall in any manner interfere with the maintenance of said custom and practice," and provision was made to coerce the constituent companies of the Terminal company to maintain this practice.

The Terminal company agreed (1) to facilitate the distribution of freight and passengers between all the railroads delivering or tendering business to it and to facilitate all business along its lines; (2) to offer equal facilities to all railroads on equal terms and conditions; (3) to be absolutely neutral and to offer equal facilities to all shippers and interests whatsoever and wheresoever located along its railway; and (4) not to discriminate unjustly in favor of any interest west of the state line to the injury of any shipper, enterprise or interest east of that line. The company also agreed that "all its charges for switching and for the transfer and distribution of freight and passengers, or the hauling of cars shall . . . be just, reasonable and uniform between all persons, firms or corporations under the same or similar circumstances and conditions," and that "there shall at no time be any unjust discrimination." The company agreed not to subject Kansas City or any person doing business there or shipping thither to any undue or unreasonable prejudice or disadvantage in the matter of switching charges over competitors in other cities or localities. It was stipulated that "the

charges so to be made may be sufficient to afford a fair and reasonable return upon the reasonable value of the property engaged in the service, which shall include such sums as the Kansas City Terminal Railway Company may have fairly and reasonably expended in its organization and in complying with the provisions of this ordinance; but in fixing such charges, the value of this grant, or the amount of stocks or bonds of the grantee shall not be considered; provided, however, that if in any proceeding before any court or tribunal passing upon the validity of a charge, any portion of the property or expenditures above named shall be by such court or tribunal excluded, then, in such proceeding, the grant hereby made may be considered as equal in value to the properties or expenditures so excluded." In order to facilitate the determination of the amount and valuation of its property and the sums expended in its organization, the company agreed to file with the city comptroller at the time the franchise became effective, a sworn statement showing (1) the amount of moneys expended in organization; (2) a description of the real estate, tracks and switches acquired from its predecessor belt railway company; (3) the amount of moneys expended in taking over the predecessor's properties, together with the encumbrance upon them, and whether such encumbrance was assumed as a part of the purchase price; and (4) a general statement as to any other moneys expended by it in the acquisition or construction of other properties. The company also agreed to file an annual statement of additional properties acquired or constructed by it, together with the amount of money expended for each of the things so acquired or constructed. The city reserved the right at all reasonable times to inspect the company's books to determine the correctness of its reports and to find out the items included in them.

The ordinance contained a provision to the effect that the company "shall, upon request, where reasonably practicable and reasonably safe, and upon deposit with it of the fair estimated cost thereof, construct, build and keep in repair switch and side tracks leading from its line to all business houses and industries engaged in shipping, and shall furnish cars for the movement of traffic to the best of its ability and without unnecessary discrimination." Moreover, the company

was bound in like manner and upon the same terms and conditions to "connect with and operate switch tracks which may be built to its right of way," and also to connect its lines upon application with the lines of other railroads when reasonably practicable. The entire cost of constructing and maintaining any such switch track or connection, including any necessary lands for right of way, was to be borne by the owners of the business house, industry or railway desiring the switch tracks or railroad connections. It was stipulated, however, that the construction of any such track or connection should not be required "unless there be a sufficient amount of business to be served on such switch or side track or by said switch connection to reasonably justify its operation," taking into consideration the fact that the Terminal company would be relieved of all construction or maintenance charges relating to such track or connection. Even if the Terminal company claimed that there was not sufficient business to warrant the construction of the switch, nevertheless it could be compelled by ordinance to construct it. The company's right to make contracts for the construction of side tracks and switches on terms satisfactory to the parties was not impaired, however, but the company was required in making such contracts to "extend to all under like circumstances and conditions equally favorable terms without unnecessary discrimination or favoritism." The company was specifically obligated to construct such switches and side tracks to the levee as the city might from time to time require by ordinance, and to furnish cars for the movement of traffic to and from the levee to the best of its ability.

This franchise could not be assigned to another company not organized under the laws of Missouri, or not having complied with the laws of the state relating to foreign corporations. Before any assignment would become effective, the assignee was required to file with the city a copy of the assignment together with an agreement binding the assignee to live up to the terms of the franchise.

An elaborate forfeiture clause was included in this ordinance. If the company should "do or cause to be done any act or thing by this ordinance prohibited," or should "fail, refuse or neglect to do any act by this ordinance required," it

would thereby forfeit all its rights and privileges under this franchise or under the franchise of its predecessor company, and the city would have the right to proceed in the courts to have such forfeiture decreed and enforced, if the company's conduct should continue unrectified for sixty days after written notice from the city specifying the particular ground of complaint. But the city and the company agreed "that in any proceeding to enforce such forfeiture, the court before which the cause is pending in the first instance or on appeal, upon finding from the evidence the existence of ground for such forfeiture, may also make a finding from the evidence whether or not the doing of such prohibited act or thing, or such failure, refusal or neglect was willful and without just cause; and if it shall find that the doing of such prohibited act or thing, or such failure, refusal or neglect was willful or without just cause, and that it was not the result of an honest mistake of law or of fact as to its duty in the premises, a final judgment or decree of forfeiture, or an affirmance of such decree of the lower court, may be immediately rendered declaring said rights forfeited." If on the other hand the court should find that the company's default had been due to an honest mistake or was the result of an unavoidable accident, judgment might be deferred until the company had been given an opportunity to mend its ways and make good its default. Moreover, certain important requirements of the franchise were expressly exempted from the provisions of the forfeiture clause just described.

487. Spurs to wharves and warehouses; switching charges limited; joint interest in tracks may be purchased by other companies; sanitary regulations during construction—Seattle. —Many franchises for railroad terminals have been granted at different times by the city of Seattle. Most of these grants contain clauses requiring the construction of spur tracks. For instance, the franchise granted January 27, 1887, to the Seattle, Lake Shore and Eastern Railway Company, contains the following typical provision:[1]

"Said company, its successors and assigns, shall allow each owner and occupant of a wharf contiguous to said railway, or to the street in and along which said railway shall be constructed, a sidetrack connecting said railway with the warehouse upon such wharf; provided, however, that such sidetracks shall be constructed and kept in repair by and at the expense of such wharf owner or occupant, and the same

[1] Charter and Ordinances of Seattle, 1908, *already cited*, p. 414.

shall be subject to such reasonable regulations as to the opening and closing of switches as said company may from time to time establish, and for the purpose of affording such wharf owners and occupants free access to and from their wharves, warehouses and manufactories situated on either side of said railway; such wharf owners and occupants shall have the right to put in and maintain switches and railway crossings over the tracks of said company in such manner as may be reasonable at the expense of the person desiring to use the same."

By the terms of another Seattle terminal franchise, granted July 20, 1900, to the Seattle and International Railway Company, it was provided that the rates chargeable by the grantee "upon empty cars or on carload lots destined over its line to or from any point or points outside of the City of Seattle," to merchants owning sidetracks along the line of this franchise, should "never be greater than schedule or terminal rates to Seattle." [1] At the time of filing its acceptance of the franchise the company was to file with the city clerk "an agreement, for the benefit of whom it may concern, that it will, with due diligence and without preference, handle and switch cars for any consignor or consignee or any other railroad company now operating or that may hereafter construct and operate or operate a railway in the City of Seattle, at charges not in excess" of a schedule fixed in the ordinance. Under this schedule the maximum switching charge allowed between various specified points ranged from $1.50 to $7.50 per loaded car, including the service of returning the empty car or of placing it for its load. In case of empty cars moved both ways the charge was to be the same as for a loaded car. Fifty cents might be added to the regular schedule rates when cars moved "in drayage service only."

In a franchise granted to the Chicago, Milwaukee & St. Paul Railway Company of Washington, May 2, 1906, the city inserted a typical provision authorizing any other standard gauge railway or terminal railway company, operating on the streets covered by this franchise, to acquire "an absolutely equal joint interest with the grantee herein, or with any of the successors or assigns of the grantee . . . in and to the track constructed and operated under this franchise, subject to all the provisions of this ordinance." [2] The purchase price was to be based on cost of construction, but interest at the rate of four per cent per annum was to be

[1] Charter and Ordinances of Seattle, *already cited*, p. 489. [2] *Ibid.*, p. 600.

added to the price unless the new company purchased an interest in the property within a given time. In case of disagreement, the price was to be determined by arbitration, the final arbitrator to be appointed by the board of public works in case of deadlock. In order to preserve the record of the cost of construction the city stipulated that within ninety days after the completion of the track to be built under this ordinance the company should file with the city clerk a sworn statement of such cost, and that, if required by either the city council or the board of public works, the company must submit the items of cost, with its vouchers.

In another franchise to the same company granted December 24, 1906, special provisions were made for protecting the city's water supply at points adjacent to the company's route.[1] While the company's right of way was being cleared and prepared and during the construction of the railroad, "the camps or living quarters of the men engaged in such work, and the accommodations for any animals employed thereon," were to be located at such distance from the river and maintained in such sanitary condition as should be approved by the sanitary engineer having supervision of the work. The railroad was to be constructed in compliance with approved plans and specifications on file with the city clerk, and all the ditches, dykes and filtration areas provided for were to be of sufficient capacity "to amply care for all drainage from said railroad." The expenses of sanitary regulation both before and after construction were to be borne by the company. Special provision was made for regulating the living quarters of the company's employees engaged in the operation of the railroad, and for closing the toilets on the trains during the time the cars were passing over this portion of the company's route.

The company was required under this franchise to pay the city at the rate of $2 per 1000 feet for all merchantable timber, owned by the city, cut or destroyed on the right of way granted to the company. All branches, tops of trees and slashings, and dead and fallen timber, were to be cleared from the right of way and burned or disposed of in some other manner.

488. General terminal facilities for all railroads; cars to

[1] Charter and Ordinances of Seattle, *already cited*, p. 627.

be transferred at one cent per 100 lbs of freight; three bonds required; terminal charges limited—Nashville.—Terminal franchises have been granted to two rival companies in Nashville. We have already had a sidelight on their relations to each other in the chapter on "Interurban Railway Franchises."[1] The original grant to the Nashville Terminal Company was approved October 19, 1897, and that to the Louisville & Nashville Terminal Company June 10, 1898.[2] The former is the more interesting of the two. By it the company was "authorized and empowered to construct, operate and maintain passenger stations, comprising passenger depots, office buildings, sheds, and storage yards, freight stations, warehouses, office and freight yards, roundhouses, and machine shops; also main and side tracks, switches, crossovers, turnouts, and other terminal railroad facilities, appurtenances and accommodations suitable in size, location, and manner of construction to perform promptly and efficiently the work of receiving, delivering and transferring all passengers and freight traffic of railroad companies with which it may enter into contracts for the use of its terminal facilities" over the route described in the ordinance within the city limits, including any territory that might be annexed in the future. The city reserved the right to grant to any other company seeking an entrance into Nashville, "or an outlet," the privilege of using the Terminal company's tracks upon payment of proper compensation and so as not to interfere with the running of the Terminal company's cars. It was expressly stipulated that the use of the company's passenger station and tracks should be granted upon reasonable terms and without discrimination to all railroad companies not already provided with terminal facilities within the city limits, and not "owned or controlled by existing railroads." The company agreed to transfer cars without unnecessary delay, for all railroad companies that would reciprocate by rendering like service to this company upon a charge of not more than one cent per 100 lbs. for freight in carload lots.

No part of the Terminal company's track, constructed on or across streets, wharves or alleys, was to be used at any time as a storage place for loaded or empty cars, but the

[1] *Ante*, section 452.
[2] Laws of Nashville, *already cited*, pp. 1046, 1087.

track was to be used only "for the purpose of promptly receiving and delivering freight along the line thereof." The company was bound to establish safety-gates from time to time along its route as the city authorities and the needs of the city might require. The speed of the company's cars and engines in crossing streets was limited to four miles an hour, and no car or engine could stop across any street for more than five minutes at one time. In case of fire, the company was to move its cars immediately to let the fire engine pass.

The company was required to execute to the city three bonds in the sum of $25,000 each, one to guarantee the payment of damages to property-owners, another to indemnify the city against personal injury claims, and the third to guarantee the construction of the company's road.

By an amendment to this ordinance, approved September 27, 1901, the Terminal company was required not to charge the Nashville & Clarksville Railroad Company "any separate or extra toll, fee, tariff or other compensation for the use of any bridge" built by the Terminal company across the Cumberland river, nor to collect from this particular railroad company "any toll, fee, tariff, rental or other compensation for the use of its terminal facilities in excess of such sum as will be sufficient to pay its fixed charges for insurance and taxes, its expense of operation and maintenance, and a reasonable return, not exceeding six per cent, upon the actual cost of property and facilities as hereinbefore provided for, to its stockholders, such cost and expenses to be certified annually on or before the first day of January, to the Mayor and City Council of Nashville."[1] Other railroads using the Terminal company's facilities were not to be charged "in excess of such tolls, fees, tariffs, rentals or other compensation as are usually and customarily charged for similar services by railroad terminal companies in the United States."

489. Excess profits to be rebated; tariff of terminal charges to be published; company taxed on value of abutting property — Duluth. —In May, 1888, the Duluth Terminal Railway Company received a franchise which required it to construct and operate a line of railway connecting different parts of the city of Duluth and to "serve impartially upon equal

[1] Laws of Nashville, *already cited*, p. 1066.

terms and conditions" all railroads connecting with it.[1] It was expressly provided that "for such service, said Terminal Railway Company shall charge reasonable rates, and whenever for the period of a year, said company's net receipts above the expenses of operation, including taxes and all reasonable and necessary maintenance, renewals and improvements, shall exceed six per cent upon the actual average cost of said company's property, during such period, the surplus, if any, above such six per cent, shall be divided by rebates, pro rata, among the parties for whom service has been performed, or facilities afforded, in proportion to the amounts paid by said parties respectively for such period." Charges for services performed or facilities afforded were to be reasonable, on pain of the forfeiture of the franchise. It was also expressly provided that "said Terminal Railway Company shall not make more than one charge for any one switching or transfer of any car, and for such service of various classes shall from time to time publish a tariff of charges therefor, said tariffs as in force to be at all times publicly posted, and no variations therefrom to be made by said Terminal Railway Company, except in the way of rebation, as hereinabove provided, on account of surplus." It was further stipulated that "in the case of freight coming from or destined to any point more than a mile from the bay of St. Louis, or bay of Duluth, or bay of Superior, in St. Louis County, Minnesota, no charge for any switching or transfer shall be made to the consignors or the consignee, (other than a railroad company or transportation agent), for such service; and no railway company connecting with said Terminal Railway Company, shall make on such freight its rate including such switching and transfer charge, higher than its corresponding rate to or from any other point within one mile of the bay of St. Louis, or of Duluth or of Superior or of West Superior."

By the terms of a franchise granted to the Duluth Transfer Railway Company May 18, 1892, the right was reserved to any other company to use the grantee's tracks, upon paying "its proportionate share, according to the number using said tracks, of a six per cent interest charge upon the cost of building such road, including all sums paid by the said Duluth Transfer Railway Company in securing said right of

[1] Franchises, Duluth, *already cited*, p. 326.

way under condemnation proceedings or otherwise, and its proportionate share according to the number using said tracks, of the yearly cost of operating and maintaining said tracks, said charges to be paid semi-annually, and for the purpose of ascertaining the cost of building said road, any railroad desiring to use said tracks, and the proper officers of the city of Duluth shall have access to the books of the Duluth Transfer Railway Company, so far as may be necessary to ascertain the cost of building, maintaining and operating said tracks so to be used." [1]

The Duluth Transfer Railway Company was given another franchise in 1893 upon the express condition that the company should "continue the construction of its system of terminal railway lines and tracks now in course of progress" and construct its lines over the route described in this grant "within such reasonable time hereafter as the diligent and practicable prosecution of said work will permit." [2] The company was obligated to afford "equitable terminal and transfer facilities for freight and passengers to all railroads entering the city of Duluth and desiring to connect with the lines and tracks of said company," to permit reasonable connections with its lines and to "serve impartially and upon equal terms and conditions and without discrimination all railroads so connecting with its lines." In case of dispute about the reasonableness of its charges, its rates were to be determined either by the state railroad commissioners of Minnesota or by arbitration.

Still another franchise was granted to the Duluth Transfer Railway Company in 1893.[3] By this grant the company was specifically forbidden to "adopt such a method of operating and constructing its tracks as will render it impracticable for any railroad entering the city of Duluth" to use them, "unless such method is necessary to the operation of the other business of the company." This grant was made on the further condition that the company should pay the city for the privilege of running its tracks on the streets mentioned in the ordinance "the sum of one dollar per year for the first ten years from the time at which 400 feet of said road is completed within this city, and thereafter for

[1] Franchises, *already cited*, p. 331. [2] *Ibid.*, p. 336.
[3] *Ibid.*, p. 338.

each year five mills for each dollar of the assessed valuation according to the next preceding assessment of the property immediately abutting on the line of said railroad company."

490. Elimination of grade crossings.—The abolition of grade crossings is not strictly a franchise question, except where it is made one of the conditions of the renewal of an expiring grant or of the enlargement of existing privileges. As a franchise question, it is primarily one phase of the general problem of railroad terminal and spur-track franchises. There is, however, a widespread movement now going on for the separation of the grades of existing steam and high speed electric railroads in and near cities from the grades of the streets and highways which they cross. The necessity for the separation of grades is twofold. Fundamentally, grade crossings invite the exercise of the police power because of the great number of fatal accidents that occur wherever railroads cross streets at grade in thickly settled districts. Secondarily, however, the police power may be invoked and the voluntary coöperation of the railroad companies invited for the sake of eliminating the expensive delays to both street and railroad traffic that are inevitable where heavy streams of traffic cross each other at grade but which, in the nature of the case, cannot be allowed to mix. Moreover, in cities, where signals, gates and watchmen have to be kept as the very least concession to public safety that can be permitted, the expense of maintenance of crossings is heavy. The safety and convenience of the public unite, therefore, with the private interest of the companies to demand the separation of grades. The only limit upon this demand is the cost of the required reconstruction work, which for the most part has to be done without any suspension of traffic, particularly of railroad traffic. Up to December 31, 1908, there had been completed or commenced in Chicago, work involving a total estimated cost of $53,622,000 under various track elevation ordinances of the city.[1] Additional work that would cost $19,000,000 more had already been provided for by ordinance, and the city's commissioner of track elevation estimated that the entire cost of eliminating all the remaining grade crossings in the present limits of

[1] Track Elevation within the Corporate Limits of the City of Chicago, to December 31st, 1908, p. 12.

Chicago, if carried through to completion, would bring the total cost of track elevation in that city up to $150,000,000. Chicago has solved the financial problem involved by requiring the railroad companies to bear the entire cost of the work with the exception of the damages to adjacent property. The net expense of the city in connection with the track elevation work already undertaken or ordered is estimated at less than one per cent of the total cost of the work. While this is fortunate from the city's standpoint, it is evident that the enormous cost of grade separation cannot in all cases be imposed in full upon the companies if the work is to be done promptly. In New York the general grade crossing law of the state provides for the payment of one-half the cost by the companies, one-quarter by the state and one-quarter by the municipality. The failure of the state to make the necessary appropriations tends to tie up the work, and probably less progress in grade separation has been made than would have been the case if the state law had left the expense to be borne entirely by the companies and the municipalities concerned.[1] In some cities a portion of the cost of grade separation is borne by the street railways. This is appropriate as more headroom is required where street cars operate through crossing subways than where they do not, and overhead bridges designed to carry street railway traffic must be stronger than those designed for other forms of street traffic only.

Aside from the problem of cost, the most important questions in connection with grade separation work relate to the new grades to be established on the streets and the railroads. It is of great importance that both street grades and railroad grades should be as nearly on the level as possible. It is out of the question to depress or elevate an entire system of city streets. The expense and the inconvenience to property owners would be prohibitive. It might be possible to depress the entire system of railroads within the limits of a city, but depression of tracks, unless the tracks are placed in tunnels, invites snow blockades. Also in low-lying cities, the depression of tracks involves expensive and difficult drainage adjustments. Moreover, where railroads are carried under

[1] See Report on Grade Crossings in New York City, submitted to the Public Service Commission for the First District by Commissioner Edward M. Bassett, Appendix B to Annual Report for 1909.

street bridges, a headroom of 20 or 21 feet is required, while streets carried under the railroads require a headroom of only about 14 feet even where they are used by street railways. On the whole, the plan of elevating the grades of the railroads seems best. When elevated bridges are built or depressed subways constructed to carry streets over or under the tracks, a perpetual tax is levied on all street traffic on account of the heavy grades required, and a great immediate and in some instances perpetual loss is inflicted upon the owners of property adjacent to the streets at the points where the approaches to bridges and subways are constructed. In cities where the natural conformation of the surface of the soil makes heavy grades on the streets necessary anyway, it is not so important to avoid changes in grade at crossings, and even in a level city elevations or depressions of a few feet may sometimes be made without great damage. One reasion for keeping the railroad tracks level was recognized in a Trenton ordinance passed away back in 1849 which provided that "through the whole city the railroad shall be preserved on a level, as nearly as practicable, to prevent the danger of cars running by their own gravity."[1] Accidents are likely to occur unless cars stay where they are placed. In determining whether railroad tracks should be elevated or depressed in any particular instance, the city should take into consideration the artistic effects. The shabby, back-yard impressions of most American cities received by strangers coming to town by rail are a matter of unpleasant notoriety. With the growth of the city-planning movement and the movement for city improvement, this condition will undoubtedly be overcome, to a considerable extent at least, in the relatively near future. An elevated railroad right of way may be an important factor in the terminal outlook from incoming passenger trains. We ought to be able to see something of a city as we ride into it. On the other hand, a high embankment of sand, barren or grown up to weeds and littered with rubbish, may be a real eyesore, and may also tend to shut out the air currents from adjacent districts and render them disagreeably hot in summer. It should be noted also that street subways as well as railroad open cuts are liable to be blockaded with snow and ice.

[1] Charter and Ordinances, *already cited*, p. 544.

491. A typical track elevation ordinance of Chicago.—To illustrate the general character of track elevation work and the terms and conditions upon which great results have been achieved in Chicago, we may take as typical the ordinance of July 9, 1894, providing for the separation of grades on an important section of the Lake Shore and Michigan Southern and the Chicago, Rock Island and Pacific railways within the corporate limits of Chicago.[1] This ordinance started out by authorizing and requiring the companies to elevate their roadbed and tracks in a specified manner. The gradients by which the tracks were to be elevated at different points along the improvement and the minimum elevations at all street crossings were specified. The length of the improvement as laid out in the original ordinance was between six and seven miles, and the work was extended still further by subsequent amendments. Thirty-seven subways carrying streets and alleys under the railroad tracks as elevated were to be constructed at the sole cost of the company, except that the city assumed responsibility for all damages in excess of $100,000, caused by change of grade of streets and alleys. An amendment to the original ordinance was adopted in 1897 stipulating that the city should have the perpetual right to open and maintain 67th street as a public highway across the railroad right of way, by means of a subway to be constructed by the Lake Shore company, but stipulating at the same time that if the city should desire in the future to extend any other streets across the railroad between certain points it would have to pay the entire expense of constructing the necessary subways. The subways built as a part of the general improvement were to have a minimum clearance of twelve feet above the roadways and of not less than seven and one-half feet above the sidewalks. The roadways were to be paved "with a single course of vitrified brick of standard quality, laid at a right angle with the curb lines, and resting on a solid foundation of hydraulic cement concrete, nine inches thick or deep when solidly tamped in place, and otherwise finished and properly crowned ready for the reception of the brick wearing surface." The curbs were to be "of granite or hard, sound limestone, free from argillaceous seams," and of the standard dimensions and finish according

[1] Special Ordinances of Chicago, 1898, Vol. II, p. 776.

to the specifications of the city department of public works. The sidewalks were to be laid of Portland cement concrete. The drainage of the subways was to be properly provided for by the construction of receiving basins connecting with the sewers, but wherever the floor of the subway was below the city sewerage system, the drainage was to be carried into a well which could be emptied of its contents by means of a pumping plant driven by compressed air, steam or electricity, to be constructed and maintained by the railroad companies at their own expense. The detailed specifications for the improvement required the elevation of the railroad from 8½ to 10 feet at most of the crossings. The streets were to be depressed in most cases not more than from two to six feet although in one or two cases the depression might be a little more than nine feet. The gradients permitted on the subway approaches ran from one to nearly four per cent. In any case where it was necessary to disturb water and sewer pipes, they were to be placed in brick conduits especially constructed for the purpose and carried entirely around the subways on either side beneath the railway embankments or under the sidewalks. Brick sewers and electrical conduits were also to be carried around the subways wherever, in the judgment of the commissioner of public works, that was necessary. All this work was to be done at the expense of the companies. The bridge superstructures supporting the railroad tracks were to be "fabricated in iron or steel which shall form the parallel walls of the subways, and with or without intermediate supports composed of iron or steel columns located in the curb lines in said subways, and parallel to and equi-distant from the face of said abutments." The abutments and foundations were to be built exclusively on the railroad right of way. The floor systems of the bridges were to be of "solid construction," or if an open floor system was used, it was to be furnished with a suitable device, covering the entire under side of the bridge floor, "which shall intercept and carry off storm water or whatever else may fall from said elevated structures." The facial alignment of the abutments was to be uniform with the building or lot lines of the streets, except where the abutments were set back for the purpose of leaving room for stairways to stations and station platforms or for the stations themselves with the neces-

sary waiting rooms and ticket offices between the abutments and the lot or building lines. The abutments were to be constructed of heavy stone or brick masonry. The embankments supporting the tracks might be constructed either with or without retaining walls, but if no walls were used the railroad right of way was to be enclosed with fences. All work in connection with the subways was to be done subject to municipal inspection and supervision. The companies were authorized temporarily to obstruct streets when necessary in the course of the work. Complete plans and specifications for all the work abutting on streets were to be submitted in advance to the commissioner of public works for his approval. The ordinance was to go into effect only upon the filing of an agreement by the companies binding them to undertake the work, and upon the execution of a $50,000 bond to guarantee the performance of the things required by the ordinance. The companies were also required to pay in advance their contribution of $100,000 toward the damages to abutting property on account of changes in street grades. Within thirty days after filing this agreement the companies were to designate the point at which they would commence the work, and thereafter at least one mile of the improvement was to be completed in each year and the whole work was to be finished by August 1, 1899. It was provided that after the completion of any section of this work of track elevation the companies should no longer be bound, so far as such section of their lines was concerned, by the ordinances of the city relating to speed of railway trains, the giving of signals and "the maintenance of gates, flagmen, watchmen, signals and signal towers."

492. Participation of street railways and other utilities in cost of grade separations; city's share of burden—Milwaukee, Memphis, Detroit.—By an ordinance passed April 15, 1902, the city of Milwaukee made provision for the depression of a certain portion of the roadbed and tracks of the Chicago & Northwestern Railway Company lying within the city limits.[1] This ordinance provided for the construction of seven or eight street bridges over the railroad company's depressed right of way. It was stipulated that so much of the work as should be within the limits of the company's

[1] General Ordinances of Milwaukee, 1906, *already cited*, p. 610.

right of way, to a maximum of fifty feet on either side of the center line of its tracks, should be done by the company at its own expense, "except that even within such limits the city or persons acting under its authority, shall do all the work necessary in handling, disturbing, replacing, removing and rearranging water pipes, sewers, gas pipes, conduits, wires and similar substructures, and said city or any street railway company owning any tracks within such limits shall do everything in the way of conforming street railway tracks to the new grade of the street, or of grading, paving or otherwise constructing or improving any part of the streets, which any such street railway company is bound to do under any existing statutes or ordinances, or which the city has power by suitable ordinance to require such street railway company to do." It was further stipulated, however, that the railroad company "shall reimburse the city for all the cost (apart from any charges for the services of any regular city officers, agents or employes) of such work as the city does within the aforesaid limits bounding the work to be done by the railway company, save as the city may be entitled to put such work done by it within those limits or the cost of such work on the owners of the water pipes, sewers, gas pipes, conduits, wire and similar substructures, or on the owners of street railway tracks, or on any other persons or companies." It was still further provided that "all work under this ordinance which is not put upon the company hereinbefore in this section shall be done by the city and at its expense, except as such work or its cost may lawfully be put upon third persons or companies; and said city shall maintain the structures and improvements provided for in this ordinance, except that said company shall paint the under side of the aforesaid bridges each year that it may be required and notified in writing so to do by the board of public works." "So far as any extra or special size, strength or arrangement of any bridge structure," continued the ordinance, "shall be necessary or desirable for the accommodation of any existing or future street railway tracks in any of the streets which this ordinance requires to be bridged, the extra or special cost due to any such provision for the street railway company's accommodation shall be borne by the street railway company; and any necessary ordinances to accomplish that result shall be

enacted by the city, and the acceptance of such ordinances by the benefited street railway companies having any existing tracks in any of said streets shall be procured before this ordinance shall become effective against the company." Another section of the ordinance required the city to assume responsibility for "any damages to adjacent property or business caused by the passage or execution of this ordinance or by the contemplated filling, elevation, depression or change of grade of any public avenue, street or alley, or of the tracks or roadbed of said railway company, or by the vacation of any street or avenue," and to relieve the railroad company entirely from defending any suits brought for the recovery of such damages.

An elaborate grade separation scheme was provided for the city of Memphis by an ordinance passed August 3, 1909.[1] At the crossings in most instances the streets were to be carried under the railroads by subways, the cost of which was to be borne as follows:

"In all instances where the street railway or interurban tracks occupy the streets to be crossed by the tracks of the commercial railroad companies, all the expense of the construction of abutments, of approaches, excavations, paving and the payment of incidental damages to property holders, resulting from injury to property by reason of the construction of such subways, shall be divided between the railroad companies, the City of Memphis and the street car companies, as follows:

"The commercial railroad companies shall bear one portion of the expense for each track owned by them which crosses such subway; the City of Memphis shall bear one portion for the space reserved by it on Broadway, or Railroad avenue, and the street railway company, or interurban company, shall bear one portion for each track owned by it, crossing beneath such subway. The respective commercial railroad companies shall provide their own girders and floor system for their tracks crossing such subways."

In the construction of viaducts over the tracks the expenses were to be apportioned in the same way. The street railway or interurban companies were not required to contribute to the expense of grade separation except at crossings used by them.

Grade separation in Detroit is being carried out in accordance with the terms of an agreement between the city, the steam railroads and the Detroit United Railway, approved by the common council June 30, 1903. This agreement, like

[1] Hughey's Digest, 1909, *already cited*, p. 959.

the Chicago track elevation ordinances, provides that the city shall assume liability for damages to property owners, but in view of the fact that in Detroit the railroad grades are elevated much less and the street grades depressed much more than in the Chicago grade separation work, the city's share of the expense is estimated at from 25 to 35 per cent of the entire cost in Detroit as against less than one per cent in Chicago. Under the Detroit agreement the companies were expressly required to "release all damages, charges or claims arising from loss of traffic or otherwise" occasioned by the changes of grade. The city undertook to maintain and repair the roadway, pavement and sidewalks in the completed subways, except the street railway tracks and space between them which the Detroit United Railway was to maintain, and the steam railroad companies undertook to maintain and repair all other parts of the subway structures, including the wing and retaining walls of the approaches. The street railway company agreed to keep the roadbed and subway approaches of streets occupied by its tracks free from snow and ice so that the subways would be at all times passable by vehicles. The street railway company also agreed to perform the work of removing and reconstructing its tracks and trolley wires, and to bear in one case one-third and in another case one-half of the cost of the sub-drainage and any other sub-surface work not required to be done at the city's expense.

493. Spur track franchises as a factor in the general terminal problem.—The industrial and commerical development of a city depends upon the convenience, adequacy and cheapness of its terminal facilities. The particular function of the spur track is to encourage factory development. Every city is anxious to grow; most of the cities are unduly anxious. A spur track franchise policy may be adopted, however, that will tend to control and direct growth as well as to encourage it. The particular function of a spur or switch track laid to connect an individual factory, warehouse or other private establishment directly with the railroads is to diminish the terminal expense and delay in handling freight and to relieve the streets of a great amount of heavy trucking. The relation of the spur track to the general public is very different from that of other public

utilities. Instead of directly serving the people generally and instead of extending through the entire street system or at least the principal thoroughfares of the city, the industrial track is localized, extending along a street for only a short distance or perhaps merely crossing one or more streets. Spur tracks are confined almost entirely to the factory and warehouse districts where the streets are used chiefly for heavy wagon traffic. The only interest the public has that would warrant the city in granting such special privileges is its general interest in the encouragement of industry and the relief of street congestion. On the other hand the factory or warehouse owner may justly claim as an incident to his ownership a right to use the adjacent streets in such a way as to permit the reasonable development and the economical use of his property. A spur or switch track built across the sidewalk to connect a factory with the street railway tracks, or a spur built across a street to connect with a steam railroad when the property on both sides of the street belong to the party interested in the spur might be regarded as merely a development of the abutter's right of access to his land. The city has no interest in limiting this right of access except as its use may interfere with the paramount uses of the public street. Where a track in or across a street is maintained for the sole use of a single factory the operation of cars over it is infrequent and can be regulated so as to cause a minimum of interference with regular street traffic. A switch track granted to a railroad company for general use in handling freight to and from a number of private establishments is in quite a different category. Here there are strong reasons for not permitting the use of the public streets at all at grade, unless all cars are handled by electricity and subject to strict regulation as to hours and routes. The first requisite in a spur track franchise is to require that the street shall not be obstructed. This involves the maintenance of the pavement in and about the track at the expense of the grantee, the requirement that cars shall not be permitted to stand in the street and the strict regulation of the time and manner of their operation. On spurs connecting with steam roads the interest of the public is primarily concerned only with the operation of the cars while crossing the streets. If the spurs connect with street car

lines, the whole policy of the city with reference to freight operation on the street railway system is involved. We have already quoted in a preceding section some of the suggestions of Mayor Logan, of Worcester, in regard to the possible development of this function of the street railways.[1] If the regular street car lines are to be used for switching freight cars, there should be strict public regulation to reduce noise to a minimum, to limit the handling of freight cars to particular hours of the day or night when passenger traffic is light, and to restrict night operation so far as possible to business streets where the slumbers of the people will not be disturbed by it. As a matter of fact the right to construct spur tracks is usually granted as a mere license revocable at any time, rather than as a franchise in which the grantee acquires a vested interest. It should be noted that, although this policy of granting indeterminate permits does not seem to have led to any extent to abuses affecting the rights of the grantees, there is in a sense less reason for making a spur track franchise terminable at any time than is the case in ordinary public utility grants. So long as operation and maintenance are guarded with sufficient care, the spur track is primarily of interest to the particular person or corporation using it. There can be no particular reason for the city's buying it or transferring it to some one else. It is not a public utility. It is a part of the private establishment with which it is connected. A railroad switch track for the general use of the road should, of course, be regarded as a part of the road and the general policy of the city regarding railroad and terminal franchises should be followed. The only reason for removing an ordinary industrial track from the streets, so long as it is properly maintained and operation is adequately safeguarded, must arise either from the abandonment of its use, or from a radical change in the general character of the district, or from important changes in local traffic conditions. A spur track grant, should, of course, be forfeitable at any time for non-user or for serious and continued violation of the terms of the franchise. Preparation for the handling of freight directly to and from cars on the inside of a factory may involve, however, the installation of rather expensive machinery and before it is undertaken the

[1] *Ante*, section 304.

manufacturer should receive some substantial guaranty that the use of the spur track for which the arrangements are being made will not be arbitrarily denied him before he has had time to get his money back in the economies made possible by the use of the spur track. It would perhaps be best to grant all spur track franchises, not to be used for general railroad purposes, for fixed terms of from ten to twenty years according to location, subject to revocation before the expiration of the period for abandonment or violation of terms and conditions, and subject to revocation after the expiration of the period at the will of the city authorities. As already suggested the city should make use of its opportunity in granting spur track privileges to encourage the development of industry along the lines best suited to promote civic welfare. It might, indeed, be desirable to make any spur track revocable at any time upon condition that the city should indemnify the owner against actual loss on the special investment made in or on account of the track. This would help to keep the city in a position to make any radical readjustments rendered desirable by congestion of population or traffic, or any other conditions incident to the growth of the city. The only possible excuse for the city's buying a spur track connected with a private industry would be this necessity for carrying out a large scheme of improvement necessarily involving the payment of damages to private property with which it interferes. The question finally arises as to the compensation, if any, which should be exacted for spur track privileges. The right to lay and maintain a private railroad track on or across a street is a grant of the use of public property for strictly private profit. The maximum limit of compensation that may be appropriately charged is the estimated value of the special privilege in excess of the actual additional cost of maintaining the street, protecting other traffic and paying any special damages to persons or property resulting from the exercise of the privilege, such additional cost being in all cases treated as the irreducible minimum of compensation to be required. As between this maximum and this minimum the city will be guided by its general policy toward the encouragement of private industries. A policy that would specially exempt factory property from taxation would also keep the compensation charged for

spur track privileges down to the minimum. On the other hand it would be a rather niggardly policy that would exact the maximum compensation. Payments should include the cost to the city of original installation and of street maintenance from time to time as incurred, plus an annual sum based upon the number of cars or the tonnage of freight operated over the track, or possibly on the length of the track maintained within street limits.

494. General spur track ordinances and policies—Los Angeles, Detroit, Chicago.—On November 11, 1909, Mayor Alexander approved a general ordinance passed by the Los Angeles council regulating the granting of permits to construct and maintain railroad spur tracks.[1] This ordinance provided that any person or corporation desiring a spur track privilege should first make application to the city council describing the route of the proposed track, and file "a map or diagram showing in detail the location of the spur track described in the application therefor, and all streets, alleys or other public places or portions thereof, upon, along or across which the same is proposed to be constructed, and the location of all property abutting upon such public streets, alleys or other public places, or portions thereof." No application would be considered unless it was accompanied by the written consent of the owners "of a majority of the frontage of all property fronting upon each public street, alley or other public place or portion thereof, upon or along which the same is proposed to be constructed, or, if across a public street, alley or other public place then by the written consent of the owners of a majority of the frontage of all property fronting on each side thereof between the nearest intersecting streets." After examining the application and finding the papers regular and sufficient, the city clerk was to submit the matter to the council at its next regular meeting after the examination was completed, and a day for a public hearing not less than two weeks in the future was to be set. If the consents were found by the city clerk to be insufficient nothing further was to be done with the application. At the time of filing the papers the applicant was required to deposit a sum equal to $10 for every block of the length of the proposed spur track, and in no case less than $25 to defray the expenses of advertising and posting notices. Not less than

[1] Ordinance No. 19,208, New Series.

seven days before the date for a public hearing on any spur track application, the board of public works was required to "cause to be conspicuously posted along the line of all public streets, alleys, or other public places, or portions thereof upon or along which such spur track is so proposed to be constructed or maintained, at not more than one hundred feet in distance apart, but not less than three in all, or when the spur track is to be constructed across any public street, alley or other public place, then along the line thereof in either direction to the nearest intersecting streets, notices of the filing of such application and of the hearing thereof." Any property owner along the street or alley within the limits for consents would have the privilege of filing his written objection at any time prior to the hearing. If after the hearing, the council passed an ordinance granting the application, construction of the spur track was to be commenced within three months and completed within six months thereafter under penalty of the forfeiture of the privilege, unless the time was extended by the council, but any such extension was to be for not more than three months.

One week before the passage of this general ordinance the city council of Los Angeles passed a special ordinance granting the privilege of constructing and maintaining a spur track to the San Pedro, Los Angeles and Salt Lake Railroad Company for a period of twenty-one years, subject to the right of the city to buy the track at the end of that time at an arbitrated valuation.[1] Nothing was said as to what would happen at the expiration of the grant if the city failed to exercise its option. The speed of engines and cars operated on this spur was limited to eight miles an hour, and the company was forbidden to let its cars or locomotives stand on any street occupied or crossed by this spur track "except during the time actually employed in switching, loading, or unloading."

The general policy of the city of Detroit in regard to sidetracks and spur tracks in or crossing public streets is embodied in an ordinance approved February 18, 1902.[2] Subject to the provisions of this ordinance, a blanket consent was given "to any person, firm or corporation owning or occupying

[1] Ordinance No. 19,202, New Series.
[2] Compiled Ordinances, 1904, *already cited*, p. 437.

any private property in the City of Detroit, and who desires to connect the same with any railroad by a side track or spur track, to construct, maintain and operate such side track or spur track in or upon any of the public streets of the city of Detroit." In each individual case the applicant for spur track privileges was to file with the commissioner of public works a map and survey which would "furnish complete means of identifying and ascertaining the precise position of every part of such side track or spur track with courses and distances throughout, so that it may be determined with certainty where any portion of the same is located." This map and survey was then to be examined by the commissioner of public works and the city engineer who were authorized "to make such alterations or changes therein as in their judgment the public interest may require, and report the same to the Common Council, together with their approval or disapproval thereof." If approved by resolution of the council, the spur track privilege sought would be complete. The tracks were in all cases to be laid under the supervision of the commissioner of public works, and were to conform to the grades of the streets in such a way as to interfere least with ordinary street travel. The grantee was to maintain sidewalks between the rails in the portion of the street set aside for sidewalk purposes and to "provide and keep in repair such suitable and permanent approaches to the side tracks at all points, that teams, vehicles and persons shall be enabled to cross said track conveniently." The rails were to be laid four feet eight and one-half inches apart, and the upper surface of the rail was to be flush with the surface of the street so as not to interfere with ordinary travel "and particularly wheeled vehicles." The grantee was required to relay the rails and keep the surface of the street between them in repair as required by the commissioner of public works. This grant was not to interfere with the city's right to enter upon the street and occupy it "in building public works for general public purposes of any kind whatsoever." No grantee under this ordinance was to "permit any car to stop or remain on the street so as to obstruct the free and ordinary use thereon," or to "permit any car to remain standing on a side track during the hours of the day or night." The council reserved the right to alter, amend or repeal this ordinance, to rescind

by resolution any rights granted under it, and to "make such regulations and rules and orders in relation to the maintenance of said side tracks or spur tracks as said Common Council may deem necessary to protect the interest safety and welfare of the city and public in relation thereto."

Chicago's present spur track policy is based upon the report of a special commission appointed May 18, 1908, by the mayor under authority of the city council and on request of the Civic-Industrial Committee of the Chicago Association of Commerce, to inquire into the whole subject of spur track grants to industrial concerns. This report is so important and interesting that I quote from it at length, as follows:[1]

"The Commission gave numerous hearings at which were present representatives of the real estate, manufacturing and railway interests of Chicago, during which leaders in these various branches of industrial activity outlined their views of the responsibilities of local government in the upholding of local industries. Your Commission also was given opportunity to visit every section of industrial Chicago during the course of its investigation and thus familiarize itself with the local situation in all parts of this great city. * * * *

"It was pointed out that switch track facilities were essential in the modern conduct of manufacturing enterprises. Economy in the handling of both raw materials and finished products demands opportunity for railway shipment with the least handling and charge for cartage. For the reasons indicated the use of switch tracks benefited the community as a whole by reducing the amount of traffic teaming upon the streets. The advantages derived from such facilities are frequently so vital to the conduct of business that the heavy investment represented by buildings and other plant would be destroyed or seriously impaired if such facilities were withdrawn.

"The features particularly emphasized in which exception is taken to the present policy of the city in the matter of switch track ordinances were:

"1st. Delay upon the part of the city in acting upon applications for switch track privileges.

"2nd. The term of the grant.

"3rd. The policy of making an annual charge for the privilege of maintaining and operating a switch track. * * * *

"The objection raised to the term in the present form of grant is that the period is too short. The term for which such ordinances are granted at the present time is ten years, with the additional provision that the grant shall be revocable at will at any time during that term. It is the opinion of those interested that a term of ten years is too short to warrant the investment of large sums of money in a plant the value of which might be destroyed by failure to secure a franchise renewal Those organizations engaged in an effort to draw outside industries to Chicago make it clear that this feature of the present form of grant is

[1] Journal of the Proceedings of the City Council, December 7, 1908 p. 1959.

a very serious obstacle when manufacturers begin to talk of a location.

"Your Commission believes that this objection is well taken and in view of the fact that the right of revocation, for reasons which commend themselves to the city government, is retained to be executed at any time, presents a recommendation that the term of the grant be extended to 20 years.

"Your Commission is fully in sympathy with the position that switch track franchises should not be burdened with any unreasonable requirements, nor on the other hand should the city be placed in a position where the granting of such privileges in the public streets imposes any financial burden upon the citizens of Chicago. The present policy of the city is to make a small, regular annual charge for the privilege enjoyed. The basis of such charge is one dollar per foot for the first fifty lineal feet and fifty cents per foot for each additional foot of public space occupied. In all except very exceptional cases this makes a very small charge. Since this policy went into effect 122 switch track ordinances have been granted and the annual aggregate payment required is $12,228.50 or practically $100 per year per track. Forty-eight ordinances provide for crossing the street only and for these the average payment is only $54 per track per annum.

"Such privileges give the beneficiary a special and to him valuable use of the street not enjoyed by other citizens, and such use makes necessary the employment of additional inspectors to see that tracks are so maintained and used as to cause a minimum amount of inconvenience to the general public. This cost should properly be borne by the beneficiary and the charge is so small that your Commission does not regard it as serious. * * * *

"After a careful consideration of the various matters involved in the questions submitted to your Commission, we beg to submit the following recommendations in the confident belief that if accepted as the permanent policy of the city it will assist materially in the industrial development of Chicago.

"1st. That the Council create a regular standing committee to be known as the Committee on Local Industries, to consist of fifteen members so selected that seven shall represent the West Side wards, five South Side wards and three North Side wards; and that to this Committee be referred all ordinances for special privileges in streets, alleys and public ways, and all ordinances vacating any street, alley or public way.

"2nd. That the term of grant for switch track ordinances be fixed at twenty years, subject to revocation during the term of the grant through the passage by the Council of a repealing ordinance.

"3rd. That the present policy of the city in the matter of compensation charge should not be disturbed.

"4th. That in ordinances providing for the vacation of any street or alley no charge shall be made for such vacation in any case where the city has not shown an acceptance of the dedicated street or alley by some act of municipal control. In all cases where there has been a definite exercise of municipal control we believe the city is justified in requiring the beneficiary of the vacation to deposit a reasonable sum of money to protect the city against any claim for damage which might arise through the vacation of the street or alley in question."

An interesting sidelight is thrown upon the importance of

switch track facilities in the development of a city's industries by a provision of a grant made by the city of Chicago as long ago as 1864 to the Chicago, Burlington and Quincy Railroad Company.[1] The council, in an effort to prevent the use of the track in a certain street, as authorized by this ordinance, for the building up of a lumber monopoly, inserted the following section:

"The right hereby granted shall not be used for the purpose of building up a lumber business in one locality in said city and destroying it in another; and it is hereby expressly provided, and the authority hereby conferred is granted upon the distinct understanding that said Chicago, Burlington and Quincy Railroad Company shall receive all lumber delivered at its depot in said city for transportation over its road, and transport the same in the order of its delivery, so far as practicable, and if it shall take or send its cars off its own tracks, and to or into the lumber yards of any one locality in said city, to be loaded, it shall, in like manner, take or send its cars to and into the lumber yards of every other locality in said city which is reached by railroad, and over which railroad the said company shall have the right or privilege to run its engine and cars, and said cars, when sent, shall be taken or sent to the respective lumber yards in said city in the order in which application shall be made for the same, so far as may be practicable: Provided, however, that said company shall have the right to refuse cars to such persons or parties as shall by their own fault or neglect detain cars delivered at their yards to be loaded, over twenty-four hours at any one time."

A provision commonly included in old Chicago railroad grants was to the effect that the grantee should permit any person or corporation authorized by ordinance to construct side tracks to intersect any tracks of the grantee "for the purpose of conveying property to and from such railroad to any warehouse, lumber-yard, coal-yard or any manufactory situated within one thousand feet of said railroad, and upon reasonable compensation being made therefor shall at all times permit the owners, or lessees of any such side tracks, or the consignees of any property, to take the cars containing such property to him or them consigned, to any such warehouse, lumber-yard, coal-yard or manufactory, situated upon any such side track."[2]

495. Duration of spur track grants; connection with factories permitted; switching charges limited—Toledo, Memphis, Cleveland.—The city of Toledo offers an unusual variety of spur track grants so far as duration is concerned.

[1] Special Ordinances of Chicago, *already cited*, p. 421.

[2] See ordinance passed September 15, 1879, granting permission to the Chicago and Western Indiana Railroad Company to lay down certain tracks: Special Ordinances of Chicago, *already cited*, p. 567.

In certain instances the council has reserved the right to terminate the grant at any time and to require the grantee on ten days' notice to remove the track and restore the street to its original condition. Some grants have been made for a period of twenty-five years, others for thirty and still others without any definite limitation as to time. Some have been granted to remain in force as long as the property of the grantee continues to be used for manufacturing or other purposes requiring the use of the track, while in some cases the grants have been made in perpetuity outright. Many of the Toledo grants stipulate that the side tracks or spur tracks for which franchises are given shall not be used for the storage of cars, and one stipulates that "no engine or car shall be moved along said track, or any part thereof, unless a watchman or brakeman shall walk in advance thereof notifying all pedestrians and drivers of vehicles on said tracks or about to cross the same of the approach of engines or cars, nor shall any engine or car be moved along said track, or any part thereof, until such watchman or brakeman shall signal the engineer or person controlling the movement of such engine and cars that the same can safely be permitted to move along said track." [1]

A belt line franchise granted by the city of Memphis June 5, 1902, to the Union Railway Company stipulated that the company "shall handle, switch and haul free of charge all cars of gravel, rock or other supplies and freight of the City of Memphis, or intended for the use of the city," and that the company "shall, at any point of its line, connect factories and industries located within one-half mile of such line upon such factory or industry furnishing the right of way and paying one-half the expense of grading, ties, rails and all other expenses incident to the construction of such connecting tracks." [2] The company was to switch empty cars free of charge when forwarded to be loaded or after having been unloaded at a point reached by the lines or spur tracks of the company. For switching loaded cars between points within the city the charge was not to exceed $2 a car, and for switching cars from a point inside to a point outside the city limits, or *vice versa*, the charge was limited to

[1] Grant of October 8, 1906, to the Moreton Truck and Storage Company: Special Ordinances, *already cited*, p. 270.
[2] Hughey's Digest, *already cited*, p. 878.

$2.50 a car. The company was also required to "receive, transport and switch all cars and freight offered by the railroad companies entering Memphis, and by industries and by all persons, firms or corporations upon the same basis of charges, upon equal and uniform service, and without unequally discriminating against the City of Memphis, or its citizens, in its rates for the transportation of the same."

By another Memphis grant to two railroad companies jointly, dated August 8, 1908, it was stipulated that the companies "shall, when called upon to do so, switch without charge all cars loaded with grain, flour, lumber, pig-iron, cotton seed, cotton and all other classes of freight, to and from other railroads, industries, warehouses, persons, firms and corporations connected with or located on the tracks of these companies within the switch limits of Memphis, which freight comes in or is destined to go out over the lines of said railroads."[1] In all other cases they were to switch loaded cars without discrimination at the rate of $2 per car, empty cars to be switched free. The companies were also required, when requested by shippers or consignees, to deliver to and receive at their depots and platforms, and to and from other compresses and warehouses located on their tracks or on connecting lines within the switch limits of Memphis, and to deliver to warehouses and sheds within the drayage limits of the city, all consignments of cotton coming in or destined to go out over the tracks of the grantees.

A Cleveland franchise granted August 7, 1905, to the Cleveland Short Line Railway Company, required the company to maintain on its railroad a uniform general switching charge not in excess of $3 per loaded car within the city limits, empties to be placed or returned free.[2] It was provided, however, that for a car carrying a load of more than thirty tons, the company might make an additional charge of ten cents per ton for the overweight. It was further stipulated that when the switching service as to any car was participated in by more than one company, then such division should be made as would secure to each of the companies at least one dollar per car for its portion of the joint service.

The whole matter of providing spur track connections be-

[1] Hughey's Digest, *already cited*, p. 899.
[2] Special Ordinances, 1907, *already cited*, p. 210.

tween railroads and individual establishments is rendered much more difficult and expensive where the necessities of grade separation require the main line tracks to be either elevated or depressed.

496. Dock terminals.—Although for every seaport, lakeport or riverport city, the control of the water front and the development of the dock terminals is a matter of supreme importance, there is practically nothing upon which to base a discussion of dock franchises in this country. New York City has for the last forty years been engaged in the slow and expensive, but necessary work of reacquiring for municipal ownership and municipal development the water front of Manhattan Island. Most of the dock facilities of Brooklyn are still in private hands, although ultimate municipalization is on the program of the Greater City. Generally, American cities have not yet begun to treat the water front as a public utility, subject to municipal development or franchise regulation. In most cases the best part of the water front has been acquired by the steam railroads in accordance with their established policy of monopolizing to the utmost all terminal facilities, upon which their strategic control of the commerce of the country depends, and also because construction along the water-side was cheaper and easier. The absorption of the water front by private and semi-private interests has been so extensive that in many cases the city has not even kept open enough of the streets leading to the river, the lake or the bay, as the case may be, to provide for the ordinary uses of the public for steamboat and ferry landings, to say nothing of the possible use of the water front for recreation and civic improvement purposes. The necessity for unified development of a city's dock terminals becomes apparent after the careless exploitation of the water front by different private interests has finally resulted in inadequate development and the practical exclusion of new water transportation lines from terminal facilities except on ruinous terms. In spite of first appearances, no city has enough water front to "go around." The water front should not be permitted to "go around," but should be kept under direct municipal control, or else developed as a unit under a franchise granted as a public trust to a private company subject to the right of termination and purchase

by the city. New Orleans and San Francisco, like New York, have adopted the policy of public ownership, but in both those cities the docks are in charge of a state board. Los Angeles has also inaugurated the policy of dock development by municipal agencies. "Unity and development according to a comprehensive plan are the chief essentials to a well ordered port," says Mr. George C. Sikes in a valuable report on harbor development in Chicago.[1] He also says: "Railroad ownership of docks affords efficient service, as a rule, for railroad purposes, but railroad-owned docks do not satisfy the needs of a community for facilities for handling traffic not transferred to or from railroad carriers. Where one railroad owns the docks, other railroads are placed at a disadvantage, to the injury of the community at large. Moreover, while railroads encourage connecting ocean traffic, with which rail competition is impossible, they seek to suppress coastwise traffic and inland water transportation. Control of dock facilities is an important aid to the railroads in suppressing competition by water-carriers. As a rule the most wideawake and public-spirited communities that have private ownership of docks are making moves to bring about public ownership."

497. A union market franchise—Portland, Oregon.—Before closing the discussion of terminal franchises, a brief reference should be made to markets, which are the terminals for the distribution of a city's daily supply of fruit, vegetables, meat, and other articles chiefly of the food supply. Markets are frequently owned by the city and sometimes by private companies on private property. A sample of a market franchise whereby the market is made to take rank as an important public utility, is the ordinance of the city of Portland, Oregon, approved August 7, 1903.[2] By this ordinance the Union Market Company was authorized to use a certain block in the city for the period of twenty-five years as a market-place for the residents of the city of Portland and the county of Multnomah. On this block the company was required to erect a brick building 65 by 200 feet in size, "provided with waiting rooms, offices for food inspectors, and offices for the managers of the market, said building to

[1] "Report on the Chicago Dock Problem," prepared for John M. Ewen, Chicago Harbor Commissioner, October, 1909.
[2] Revised Ordinances of Portland, 1905, p. 163.

be properly provided with heating apparatus and lighting by proper windows and artificial light; and the buildings, sheds, and driveways to be properly drained with pipes having iron grate inlets, and with adequate sewer connections; the floors of both buildings and sheds to be constructed of asphalt, concrete, or other equally serviceable pavement." The company was also required to erect two sheds or open structures 50 by 200 feet in size "for the use of marketers of produce, and so constructed as to furnish protection from weather." The market was to be kept open throughout the year on business days during market hours, and the property was to be used exclusively for market purposes. The cost of the proposed buildings and improvements was to be $30,000. The city auditor was given authority "at all convenient times" to examine the company's accounts in order to ascertain the business done by the company. For the first ten years an annual rental of $100 a month was to be paid to the city for the franchise, and thereafter such additional sum as might be determined by a board of arbitration. The company was also required to provide free not to exceed three rooms in the market building for the meat inspector, the market inspector and the milk inspector of the city. Artificial stone sidewalks and curbs all the way around the market were to be provided by the company. Failure to do so, failure to keep them in repair throughout the period of the grant or failure to pay the monthly compensation for sixty days would render all rights acquired under this franchise subject to forfeiture. At the expiration of the grant or upon the surrender or cancellation of the franchise, the city would have the option of purchasing the property at a fair valuation to be fixed by three arbitrators. The price so fixed was to be paid to the company before the latter could be "deprived of the possession or the right to maintain and operate said plant and property." But before the city could buy the market, the project would have to be approved by the electors upon submission either on the initiative of the council or on petition of fifteen per cent of the electors. In case the city did not purchase the property it would be bound to renew the grant to this company or else give it to some other company that would buy the property.

CHAPTER XXXVII.

FERRY FRANCHISES.

498. Relative unimportance of ferries.
499. Early ferry leases in New York City.
500. A modern railroad ferry lease in New York City.
501. Ferry franchises in Detroit.
502. Ferry corporations and public ferries in California.

498. Relative unimportance of ferries.—While almost all large cities have considerable water front it is only in the case of those located on very broad streams or broken into by wide harbors that ferries are of much importance. Over all but the very widest rivers bridges are built and form the most convenient means for crossing, because a bridge is only a continuation of a street, and a trip across a bridge does not involve any break in the continuity of traffic such as is inevitable on ferries. It is only in a few cities like New York, Boston, Detroit and San Francisco, that ferries are in daily use by great throngs of people. In Boston the East Boston ferries are operated by the city at a loss, and now many of the people ride through the tunnel operated by the Boston Elevated Railway Company. New York City has owned all its ferries almost from the beginning, but until recently the city's uniform policy was to lease the ferries to be equipped and operated by private individuals or companies. Four or five years ago, however, a start was made in the direction of complete municipalization. Now two ferries are operated by the city, as against nearly forty that are still operated by private parties under lease from the city.

499. Early ferry leases in New York City.—The early charters granted to New York City by the colonial governors included a monoply of the ferries on all the waters surrounding Manhattan Island. Accordingly, New York City from early times has had practically exclusive control not only of the ferries to Brooklyn and Staten Island, but also of those running to points on the west bank of the Hudson river in New Jersey. In 1866 there were no less than

twenty-six municipal ferries being operated by various private parties under lease, paying an aggregate rental to the city of $181,230.[1] Five of these ferries, operated from the lower end of Manhattan Island to various points in Brooklyn, were held by the Union Ferry Company of Brooklyn under a ten-year lease dated May 29, 1860, and calling for the payment of an annual rental of $103,000 to the city. The company agreed at its own expense to "provide, furnish, navigate, and use, at each of said ferries, as many good and substantial steam ferry-boats as may be necessary to transport and convey with safety, convenience, and expedition, all persons who may desire to cross said ferries respectively," a minimum number of boats for each of the ferries being specified. It was stipulated, moreover, that the company should "keep on hand, ready for use, such and so many extra or spare boats as may be necessary to keep up the supply of boats at the several ferries, in case of damage to or requiring repairs of the boats regularly employed on said several ferries." The boats used were to be subject to the approval of the city comptroller and were to be exclusively employed on the ferries "to carry, transport, and convey carriages, horses, cattle, passengers, and other property and effects across the same with safety, convenience and expedition." The boats were to be kept in good repair, furnished with all necessary proper implements and machinery, and "manned, while running, with a sufficient number of able-bodied and skillful men to manage the same, and who shall and will at all times be ready and willing to, and who shall, give their constant and ready attendance at the said ferries respectively." The company agreed to obey all laws and ordinances of the city in regard to the ferries and act agreeably to the regulations which the comptroller or the common council should establish relative to the time of departure of boats from each end of the ferries, the time of starting the boats in the morning or the time of running them during the night, and relative to all matters pertaining to the good management of the ferries and the accommodation of the public. The bulkheads and fixtures used by the ferries were to be kept in repair at the company's expense. The com-

[1] Compilation of Ferry Leases and Railroad Grants, New York, 1866, compiled by David T. Valentine.

pany agreed not to increase the ferry rates above the prices established and charged on the tenth day of November, 1859, by resolutions of the common council. The ferry lease was not to be assigned, set over or underlet, in whole or in part, without the city's consent. At the expiration of the term of the lease, the company agreed that it would "peaceably and quietly leave, surrender, and yield up" the ferries, "with the rights, privileges and appurtenances thereunto belonging, with the bulkheads, piers, docks, floats, bridges, and other fixtures and improvements which may have been erected" by either the city or the company for the use of the ferries, in good order and condition. The city, on its part, agreed to purchase or cause to be purchased "at a fair appraised valuation, the boats, buildings and other property" of the company "used upon said ferries respectively and actually necessary for the purposes of said ferries." The company agreed that each ferry-boat should have attached to its engine a fire apparatus or force pump, with not less than 400 feet of hose of the quality and dimensions used by the city fire department, and this apparatus was to be used in extinguishing fires whenever required by the chief engineer of the fire department. The company was to be allowed twenty dollars an hour for the time during which this fire apparatus was in use.

Until 1871, the company continued to pay the annual rental of $103,000, but at that time the city authorities reduced the rental to one dollar a year in consideration of a reduction of the toll rate for foot passengers during two hours in the morning and two hours in the evening to one cent. The uniform rate had formerly been two cents. In spite of this reduction of fare during the rush hours, the company's gross revenue increased from an average of $837,325 a year during the ten years prior to May 1, 1871, to an average of $987,370 a year for nine years immediately following that date.

On April 20, 1859, a ten-year lease of the ferry from Grand street, Manhattan, to Williamsburgh, Brooklyn, was granted to certain individuals at an annual rental of $15,000. The boats were to run once every five minutes from one hour before sunrise to one hour after sunset, and "once in every quarter of an hour" during the night, or as fast as the pas-

sengers and freight could be discharged. The schedule of ferry rates accompanying this lease was as follows:

For every foot-passenger, three cents.
Commutation for foot-passenger, per year, $10.
For man and horse, and for every steer, ox or cow, twelve cents.
For every one-horse wagon, light, eighteen cents.
For every one-horse pleasure carriage, with two persons; for every one-horse wagon, loaded; for every two-horse wagon, light; and for every gig or sulky, twenty-five cents.
For every two-horse pleasure carriage with four persons and driver, and for every two-horse wagon loaded, thirty-seven cents.
For every two-horse wagon with hay or straw, fifty cents.
For every score of sheep or hogs, seventy-five cents.
For every calf, three cents.
For every dead hog, weighing not more than 100 lbs., six cents.
For every dead hog weighing over 100 lbs., eight cents.
For every 100 lbs. of iron, butter, cheese, etc., four cents.
For every barrel of cider, liquor or pork, six cents.
For every barrel of flour, four cents.
For every one-horse milk wagon, commutation per month, four dollars.
For articles not enumerated, at rates in proportion to those specified.

500. A modern railroad ferry lease in New York City.—Several of the important steam railroads having terminals at New York are compelled to take passengers to and from Manhattan Island by ferry. The Long Island Railroad Company has operated one or more ferries from its terminal at Hunter's Point, Long Island City, to various points on the Manhattan side of the East river for about fifty years. At last in September, 1910, this company secured direct access to Manhattan for a portion of its trains through the Pennsylvania tunnels. About a year earlier the Queensboro bridge had been opened and through trolley service had been installed from the borough of Queens across this bridge to Second avenue and Fifty-ninth street, Manhattan. Prior to this time the Long Island Railroad ferry to east Thirty-fourth street had been carrying about 20,000,000 passengers annually. In anticipation of decreased patronage for the ferry, the railroad company when its lease expired May 1, 1909, declined to renew it on the old basis of a ten-year period at an annual rental of $12,000. Instead, the company after considerable delay took a lease of the ferry for one year at a rental of two per cent of the gross receipts of the ferry "for the transportation of persons, goods and chattels." The company agreed to keep separate books of account show-

ing the daily gross receipts of the ferry "whether by money paid or by commutation tickets or return railroad tickets purchased on either side of said ferry and the expense thereof." These books were to be open to examination by the dock commissioner or his representative at all reasonable times. The company was required to furnish and maintain "the necessary ferry structures, floats, racks, fenders, bridges, and other fixtures at the landing-places." The company agreed to keep the slips occupied by its boats dredged out so as to maintain a depth of water of ten feet at low tide, and to keep the entire space in front of the bulkhead clear to that depth from sewage "and all other material injurious or dangerous to, or destructive of, life, health or comfort." The company agreed to keep the wharf property used in connection with the ferry in good repair, and to restore any bulkhead or pier injured through its carelessness. The company was also to indemnify the city against damages to persons or property arising from the company's negligence. In case the city should at any time require the property used for ferry purposes "in order to proceed with water front improvements in the vicinity of the ferry landings," the company was bound to surrender and vacate the premises without any claim for damages, upon three months' written notice from the city. The company was required to "keep and navigate" enough "good and substantial" steam ferry boats, approved by the dock commissioner, to accommodate traffic. The boats were to be kept in good repair and furnished with "a sufficient number of proper implements, tackles and necessaries." At the places on the boats where passengers embark and disembark gates were to be erected. The schedule of service was to be fixed by the dock commissioner. Fire service was required as in the older ferry leases described in the preceding section. The boats were to be manned with "sober, honest, skillful and able-bodied men." It was stipulated that nothing in this lease should prevent the city from granting future ferries to and from New York City except to and from the specific points mentioned as the termini of this ferry.

During the year 1908 the city received $286,411.53 in ferry rentals from the thirty-seven ferries operated by private parties. The gross receipts of the two ferries operated by the

city amounted to $838,395.97, but the cost of operating them was $1,553,654.86 without counting interest on investment, which at four per cent would be about $338,000. The East Boston ferries were operated during the year ending January 31, 1909, with gross receipts amounting to $104,289.31 and expenses totalling $267,003.39, including interest on loans.

501. Ferry franchises in Detroit.—By an ordinance originally approved July 24, 1861, and amended several times in later years, the common council of Detroit prohibited any person from keeping a ferry or boat "for carrying and transporting persons and property across the Detroit River, to the opposite shore," without a license from the mayor.[1] The regular license fee was $250 a year for each boat carrying passengers, teams and animals, and $200 a year for each boat carrying passengers only. Special fees were established, however, for boats between certain specified points and for passenger boats used in the night only. All licensees under this ordinance were to have the right in common of making a landing with their boats at the city dock at the foot of Woodward avenue. Each ferry licensee was to keep one or more good and sufficient boats, "with a sufficient number of trusty and experienced hands to work and manage the same," and it was stipulated that "no ferry, while in use as such, between sunrise and 7 o'clock P. M. of each day," should be allowed to remain at the usual ferry landing more than six minutes between trips, unless out of repair or delayed by ice. The granting of one ferry license by the mayor, was not to prevent him from licensing others to run between the same points, but no licensee could run his ferry between any other wharves or points than those designated in his application and license. It was stipulated that "no gaming, drunkenness, quarreling, fighting, blasphemy, or any rude, disorderly or immoral conduct, shall be allowed on any ferry." On each ferryboat was to be posted in a conspicuous place a printed list of the rates of ferriage, which were not to exceed the following:

"For a foot passenger, except children under ten years of age, ten cents; and for such children, five cents. For a horse and rider, twenty cents; for a horse, fifteen cents; for one horse and vehicle, with two persons, twenty-five cents; for two horses and vehicles, with not more than four persons, fifty cents, and ten cents for each additional horse;

[1] Compiled Ordinances, 1904, *already cited*, p. 238.

for each head of horned cattle, ten cents; for each sheep or hog, five cents. For each one hundred pounds of baggage, or other article, five cents."

No person licensed to run a ferry was authorized to use his ferry-boat at any time between sunrise and seven o'clock in the evening for any other purpose or business than that covered by his license.

On December 24, 1884, an ordinance was approved prescribing the license fees and rules for the operation of the ferries to Belle Isle, Detroit's beautiful island park.[1] Under this ordinance as amended in 1898, vessels carrying over 500 passengers were to pay an annual license fee of $150 and vessels carrying less than 500 passengers were to pay $50. All ferry-boats running to Belle Isle were to be operated subject to rules and regulations prescribed by the park commissioners. Rates of fare were limited to five cents each way for persons over twelve years of age, one-half that amount for children between six and twelve years old, and free carriage for children under six when in charge of parents or friends. It was stipulated that "good order shall at all times be preserved on vessels so licensed; no spirituous or malt liquors shall be sold thereon, and such vessels shall not be crowded or overloaded at any time, or beyond the capacity fixed by the United States Inspectors."

On July 7, 1894, a special ordinance was adopted granting permission to the Detroit, Belle Isle and Windsor Ferry Company to make landings with its ferries at the city docks at the foot of Twelfth and Twenty-fourth streets.[2] Under this ordinance the company was allowed to charge ten cents for adults and five cents for children, each ticket to be good for a round trip to Belle Isle or for pleasure riding as long as the passenger cared to stay on the boat. This grant was for a period of five years, subject to the right of the city to revoke the grant before the expiration of that period at any time when the common council was satisfied that the company had intentionally violated any of the provisions of the ordinance.

In recent years Detroit has had some trouble with the ferry company, the latter claiming that it could not afford

[1] Compiled Ordinances, 1894, *already cited*, p. 240.
[2] *Ibid.*, p. 387.

to sell one-way tickets to Belle Isle for five cents. After considerable controversy the general ordinance fixing ferry charges was amended July 8, 1909, so as to permit a limitation of the one-way traffic. As amended the ordinance requires the sale of coupon ferry tickets for ten cents each at all ticket offices. Such tickets are to be "good on date of issue only, one coupon of which shall entitle the holder thereof to ride at pleasure during regular trips of vessel for passage on which coupon is surrendered, and the other coupon of which shall entitle holder after disembarking at Belle Isle, to resume on any such vessels, at Belle Isle, the ride interrupted by such disembarkation, or to ride from Belle Isle over bridge on so-called 'phaeton service'—coupons accepted for passage on such phaeton service to be redeemed at three cents each whenever presented for redemption by the Commissioner of Parks and Boulevards." The phaetons referred to are operated regularly to accommodate the public in crossing the long bridge connecting Belle Isle with the mainland, no street car service being available over this bridge. The amended ferry ordinance also prescribes that one-way ferry tickets for returning from Belle Isle to the city shall be sold for five cents each, good on vessels leaving Belle Isle at 8:30 P. M. or later in the evening. Half-fare tickets are provided for children between six and twelve years of age.

502. Ferry corporations and public ferries in California.—Under the general laws of California no corporation may operate a ferry for hire without first securing authority to do so from the county board of supervisors or other governing body having power to grant the privilege.[1] If a ferry company fails to put its ferry in operation within three months after authority to establish it has been acquired, or if the company abandons operation for a period of three months its corporate charter is forfeited. Every ferry company is required to make an annual report to the governing body from which it received its privileges, showing (1) the cost of constructing and providing all necessary appendages and appurtenances for its ferry; (2) "the amount of all moneys expended thereon, since its construction, for repairs and incidental expenses;" (3) "the amount of its capital stock,

[1] Corporation Laws of California, 1907, p. 120.

how much paid in, and how much actually expended;" (4) "the amount received during the year for tolls, and from all other sources, stating each separately;" (5) "the amount of dividends made, and the indebtedness of the corporation, specifying for what it was incurred;" (6) such other facts and particulars respecting the corporation's business as the governing body by which the grant is made may require.

Whenever authority to erect and keep a ferry over waters dividing two counties is desired application must be made to the board of supervisors of the county "situated on the left bank descending such bay, river, creek, slough, or arm of the sea."[1] In granting the desired authority the board of supervisors may fix the amount of the grantee's bond; fix the amount of license tax to be paid, which shall be not less than $3 or more than $100 per month, payable annually, and fix the rate of tolls, "which must not raise annually an income exceeding fifteen per cent on the actual cost of the . . erection and maintenance of . . the ferry for the first year, nor on the fair cash value, together with the repairs and maintenance thereof, for any succeeding year." The license tax and the rate of toll so fixed may not be changed during the term of the grant unless it is shown to the satisfaction of the board of supervisors "that the receipts from tolls in any one year are disproportionate to the cost of . . erection, or the fair cash value" of the ferry, together with the cost of all necessary repairs and maintenance. It would be hard to tell just what these provisions in regard to tolls mean. The California law-makers seem to have been hopelessly muddled in their ideas of proper accounting. Literally interpreted, this law would add the cost of repairs and maintenance to capital account each year and limit gross receipts during the succeeding year to fifteen per cent on this sum, without reference to operating expenses. The license tax may not be fixed at more than ten per cent of the tolls collected. In addition to the things required by a law which I have already described, the company must report annually the expense of labor, hire of agents and other costs necessarily incurred in and about its business, and the estimated actual cash value of the ferry, exclusive of the franchise. Whenever the board of supervisors is about to fix the license rate and the rate of

[1] Corporation Laws of California, 1907, *already cited*, p. 267.

tolls, it must "make inquiry into the present actual cash value and the cost of all necessary repairs and maintenance" of the ferry. If the owner of the ferry does not agree to the estimate made by the board, the matter is to be determined by three commissioners, one appointed by each party to the controversy and the third by the county judge. In the granting of a ferry franchise preference must be given first to the owner of land to be used as a terminal on the left bank of the water, descending, and second, to the owner on the right bank, over other applicants. Every application must be advertised and a public hearing must be held in each case. If the board of supervisors finds that the proposed ferry is a public necessity or convenience, the franchise may be granted for a term of twenty years. The board is authorized to make rules and regulations for the government of ferries and ferry keepers, prescribing:

"1. How many boats must be kept, their character, and how propelled;
"2. The number of hands, boatmen or ferrymen to be employed, and rules for their government;
"3. How many trips to be made daily;
"4. When and under what circumstances to make trips in the nighttime;
"5. Who may be ferried free of toll;
"6. In what cases of danger or peril not to cross;
"7. Penalties for violation of regulations;
"8. In case of steamboats, the rate of speed;
"9. The method of and preference in loading and crossing; and,
"10. How and by whom action must be brought to recover penalties."

CHAPTER XXXVIII.

OMNIBUS AND COACH FRANCHISES.

503. Licensing and regulation of miscellaneous vehicles used to transport persons and property for hire.
504. The Belle Isle automobile service.—Detroit.
505. The Fifth Avenue Coach line.—New York City.

503. Licensing and regulation of miscellaneous vehicles used to transport persons and property for hire.—Regular stage or omnibus lines, with definite routes and fixed termini, supplied the local transit facilities of sixty years ago. Their operation was both urban and interurban. The steam railroads and the interurban trolleys have practically driven the country stages out of business, and the street cars long ago supplanted the urban stage lines except in a very few instances. The old urban stage routes were so well established and represented such powerful vested interests that in many instances the street railway companies were required to start in by buying out the stage lines. In some cases the price paid was up in the hundreds of thousands of dollars. There is still a very large cab, express, and drayage business, which is carried on in every city, big or little. In most cases, however, this business in its various branches, while recognized as a public utility in a certain sense, is sharply differentiated from those great utilities which depend upon the use of continuous fixtures in the streets. The cab and local express business is not closed to effective competition in the way that the street railway business is. And yet the presence of men and vehicles waiting in the streets and public places for a chance to serve anybody who comes along would constitute a nuisance if their business was not subject to strict municipal regulation. As a matter of fact hackmen, expressmen, draymen and their ilk ply their trade in the public streets, thus using public property in a peculiar sense as their capital. In some cases railroad companies having terminal arrangements that invite monopoly grant exclusive cab and omnibus

concessions to particular persons or companies. These are real franchises, only they are granted by private corporations, themselves the beneficiaries of public franchises. These concessions, however, are not matters of public record and they cannot be treated here as municipal franchises. Aside from such exclusive privileges at railroad terminals, the cab and omnibus business is usually open to all who are willing to take out a license, pay a stipulated fee and submit themselves to public regulation. In some respects these regulatory ordinances bear a close resemblance to franchise grants. They usually stipulate the rates that may be charged for various classes of service. In practically all cases charges are arranged either on the zone system, or according to the length of time the vehicle is used. While vehicles devoted to the transportation of baggage, express and freight usually load up with the articles belonging to several different persons, cabs and hacks, except those running between railroad depots and hotels, are used exclusively at any particular time by one person or one group of persons. The ordinances governing the operation of hacks, cabs, express wagons, etc., besides fixing the rates that may be charged for passengers and baggage, usually fix the license fee to be paid for each vehicle, the hours when all licensed vehicles must be ready for service, and the places at which they may stand while waiting for business.

Some of the regulations regarding the conduct of the men engaged in this business are both instructive and amusing. The little city of Ann Arbor, Michigan, is the seat of a great university. There are two railroads entering the city, and their depots are separated nearly a mile. Several thousand students move in and out of Ann Arbor every year. One section of an Ann Arbor ordinance approved March 17, 1896, provides that "no person while acting in the capacity of a public porter, or runner, for any hotel, or other public house, or as an omnibus agent, or as the driver of any hack, omnibus, baggage wagon, dray, or other public carriage, or vehicle for the transportation of passengers or property, shall in any manner tease, vex, or annoy citizens or passengers in soliciting patronage for his hotel, or vehicle, by following after, surrounding, obstructing or in any manner interfering with a quiet and undisturbed egress or departure of any and

all passengers, or citizens, from the depots and depot grounds in this city, of the Michigan Central and Ann Arbor Railroad Companies, and no such porter, runner, driver, agent, or drayman shall make, aid, countenance, or assist in making any loud or boisterous noise, disturbance or improper diversion, or be guilty of any indecent, immoral, obscene, or insulting language, conduct or behavior, at or near either of said depots, or at or near any hack, or dray stand, or in or about any of the public streets, alleys or other public places of the city."[1] To one who as a student has run the gauntlet of the vociferous cab-criers in front of the Ann Arbor depot, the provisions of this ordinance seem very refreshing. It seems that in Grand Rapids even the street car conductors must have been at one time in the habit of leaving their cars to solicit traffic, for by an ordinance as amended March 21, 1892, owners, drivers and conductors of vehicles were forbidden to solicit patronage "except in a respectful and orderly manner and in a respectful and ordinary tone of voice," or to make such solicitations anywhere but "immediately at the door or other place of entrance into such vehicles."[2] Moreover, it was expressly provided that these restrictions should apply "to the owners, drivers and conductors of street railway cars and sleighs," who were required not to "leave their respective routes of travel, or their cars to go for, convey, or solicit passengers or baggage" and not to stop longer than three minutes at a time anywhere on the line except at the termini and on switches waiting for cars going in the opposite direction to pass.

The practice of rude solicitation by hackmen was condemned in vigorous terms by an ordinance of the city of Erie, passed February 18, 1882.[3] "But one person, whether owner or driver of any hackney coach, omnibus, or other carriage," says this ordinance, "shall be allowed to solicit passengers at any railroad depot or terminations, steamboat or other landings; or at any other place in said city; and such person must be the regular driver of said carriage; and such owner or driver shall not leave such coach, omnibus or other carriage, while waiting for employment at any such place, neither shall he be allowed to snap his whip or use any inde-

[1] Charter and Ordinances of the City of Ann Arbor, 1908, p. 281.
[2] Ordinances, Grand Rapids, Mich., 1907, p. 182.
[3] Digest of the Laws, Ordinances and Rules, Erie, 1907, p. 100.

cent or profane language, or be guilty of loud, boisterous talking or hallooing, or any kind of disorderly conduct, or scuffling, or obstruct any crossing or sidewalk; and the person so allowed to solicit passengers . . . shall have no altercation with any other owner or driver of a coach or other carriage, or make any disparaging or offensive remark concerning the person, business, employee, or public house of any other person or persons so owning or driving any other coach or carriage."

Another evil sometimes found in the conduct of the cab business was aimed at by a section of an ordinance adopted by the city of Troy, New York, April 4, 1867, which provided that "no owner or driver of any licensed hackney carriage shall induce any person to employ him by either knowingly, wantonly or ignorantly misinforming or misleading such person as to the time or place of the arrival or departure of any railroad car, steamboat, canal boat or other public conveyance whatever, or the location of any railroad depot, office, station, or any railroad ticket office, or the location of any hotel, stage office, public place or private residence within said city." [1]

In many cases the ordinances are very particular about the hackmen keeping lights on their vehicles, and their numbers attached to them in a conspicuous place. Sometimes a minimum age requirement for drivers is established and in some cases all drivers are required to be residents of the city. A frequent method of enforcing the terms of a regulatory ordinance is by reserving to the mayor the right to revoke the license of any recalcitrant hackman or drayman.

504. The Belle Isle automobile service.—Detroit.—Belle Isle is Detroit's principal park and popular pleasure ground. It is located in the Detroit river and is joined to the mainland by a long bridge over which the street cars are not permitted to run. It is necessary, therefore, for the city to provide some means of transportation from the end of the street car line across the bridge to and around the park. A cheap phaeton service, operated by horse-power, has long been maintained by the park department itself. In recent years, however, a supplementary automobile service has been supplied by a private company under a contract with the depart-

[1] Municipal Ordinances of the City of Troy, 1905, p. 243.

ment. The original term of this contract now in force was two years, and the company agreed to furnish ten automobiles, each seating 25 passengers.[1] All the cars were to be in commission from May to October. At least one car was to be run throughout the rest of the year, and three others were to be kept ready for use in case of need. In the summer the cars were to run as often as traffic required, subject to the direction of the park department, but in winter no regular service oftener than once every 40 minutes could be required, except when the park phaetons were discontinued, when a twenty-minute service could be called for, and except during the skating season, when six cars were to be in commission ready to run as often as necessary. The automobiles were to start at eight o'clock in the morning from June to September and one-half hour later during the rest of the year. They could be required to keep running in the afternoon or evening until the passenger traffic on Belle Isle had ceased. The specific routes to be followed by the cars were described, and the park department was to supply loading stations at certain specified points. In a trip around the island, one stop-over ticket was to be given to any passenger on request. The rates of fare across Belle Isle bridge were fixed at three cents in summer and five cents in winter, and the fare around the park was to be fifteen cents for adults and ten cents for children. Policemen and park musicians in uniform were to be carried free, and passes were to be given to the principal officials of the park department. The city was to sell the tickets to the passengers and redeem all that were taken up by the company, the city retaining two per cent of the gross receipts to pay the cost of handling the tickets. The company was authorized to erect a building in the park in which to keep and repair its cars. At the expiration of the contract this building was to be removed. The company was to give a $2,000 bond to guarantee the faithful performance of its obligations, and the city reserved the option to buy the company's equipment at the end of the contract period.

505. The Fifth Avenue Coach line—New York City.—Fifth avenue was too aristocratic for street cars and so it had to have a full-fledged old-fashioned stage route. The fran-

[1] Abstract of contract furnished to the author by Park Commissioner Hurlbut, August 27, 1910.

chises for this line have been granted directly by the state legislature, and the scandals attending the latest of these grants are still hovering over the political world. The original franchise granted in 1886, authorized the Fifth Avenue Transportation Company (Limited), without further consent except that of the abutting property owners, to run a line of stages or carriages for the transportation of passengers for hire, along Fifth avenue and South Fifth avenue from Eighty-ninth street south across Washington Park to the Bleecker street elevated railroad station.[1] License fees were to be paid at the same rate as on the old line of stages that had run on Fifth avenue from 1850 to 1885. The rate of fare was limited to five cents. Three years later the company's routes were extended and its functions enlarged as far as the extensions were concerned to include the carrying of parcels.[2] A few years afterwards the company went into bankruptcy and was succeeded in 1896 by the Fifth Avenue Coach Company, which still operates the line. It was in 1900 that the legislature by an act to amend the Transportation Corporations Law added to the law a new section, general in its terms, which conferred unusual and extraordinary powers upon the new company.[3] Under this act any company owning and operating a stage route that had been continuously operated for the five years last past, in a city of the first class, was "authorized and empowered to extend its existing routes at any time or times and to operate the same as extended with stages and omnibuses propelled by electricity or any other motive power, in and upon any streets and highways of such city, without further or other authority, proceeding, or consent required under any act, general, public, private or local; provided, however, that such extensions shall not become valid until they shall have been first approved by the State Board of Railroad Commissioners." The certificate of approval granted by this board in the case of any particular extension was to be filed in the Secretary of State's office, and when the company's acceptance had been filed and the extension put in operation the company would be authorized to raise its rate of fare to ten cents "for a continuous ride over the whole or any part of the routes owned or operated by it."

[1] Laws of New York, 1886, chapter 536. [2] *Ibid.*, 1889, chapter 182.
[3] *Ibid.* 1900, chapter 657.

The company was to pay to the city a license fee equal to the charge then in force for licensing similar stages and omnibuses, and also five per cent of its gross receipts from the operation of its routes. Important extensions of route were laid out in 1900 and 1901, and now the company is operating under perpetual franchises that relieve it entirely from municipal control.

PART IV.

TAXATION AND CONTROL OF PUBLIC UTILITIES.

CHAPTER XXXIX.

CONSTITUTIONAL AND STATUTORY LIMITATIONS AFFECTING LOCAL FRANCHISE GRANTS.

506. Scope and purpose of the concluding discussion.
507. The National Municipal League's program in its relation to franchises.
508. Franchise provisions of the new Michigan constitution.
509. Municipal "home rule" in franchise matters.
510. What franchise limitations should be put into the state constitutions?
511. What franchise limitations should be put into the general laws of the state?

506. Scope and purpose of the concluding discussion.—Although this work is entitled "Municipal Franchises" its scope has not been strictly confined to urban franchise grants made by local authorities. In some cases I have discussed the terms of leases, such as the lease of the Los Angeles waterworks, of the Philadelphia gas works, and of the Boston subways. Sometimes the discussion has related to a mere local contract supplementing a state franchise as in the case of the New Haven Water Company. In some cases I have described regulatory ordinances like the gas ordinance of Minneapolis. In many instances, especially in the eastern cities, I have been compelled to go to the acts of the state legislature to find the local franchise grants. In a few cases I have discussed the terms of general statutes under which public utility companies are organized and secure the right to use the public streets. In the case of the public utilities of the District of Columbia, of the Hetch-Hetchy water project of San Francisco and of the electric traction bridge over the Mississippi river at St. Louis, it has been necessary to recite the acts of Congress or of the federal administration. Nevertheless, in spite of the multiplicity of authorities from which at different times and in different places public utility companies have secured franchise rights in city streets, the main purpose of this book has been to deal with the terms and conditions which have been or may properly be imposed by the cities themselves in granting local franchises, leases

or contracts to public utility companies, and to a less extent in passing regulatory ordinances under the police power, or under the reserved rights mentioned in the franchises themselves. In the brief concluding chapters still to be written, it is necessary to discuss the general principles of taxation and control that have been or may be established by the state; for all urban grants and contracts are necessarily confined within the lines laid down by the sovereign body. Many volumes might be written on the practice of the various states of the Union in these matters, but the limitations of this book and of the author's learning do not permit a detailed description here of the constitutions and laws of forty-six commonwealths. In this chapter I shall make a few observations of the most general nature upon the constitutional and statutory provisions necessary or desirable to protect the cities in the exercise of their legitimate functions in relation to public utilites and to prevent so far as possible the abuse of municipal discretion in these matters. In the succeeding chapters I shall elaborate somewhat a few of the broad general problems that have to be considered in the formulation of franchise policy, whether state or local.

507. The National Municipal League's program in its relation to franchises.—Every year since 1894 has seen a national Conference for Good City Government, held under the auspices of the National Municipal League. When the civic reformers from various cities first got together for conference in the early years of the nation-wide movement for better city government, many choice tales of adventure were related. It soon became apparent that between election "Indians" and public utility highwaymen no franchise was safe anywhere in the United States, whether it was the citizen's individual right to vote or the city's collective right to control the use of the streets. After a few years of mutual commiseration on their experiences and mutual felicitation on their hopes, every tale of woe having its consolation in the joy of conflict and the assurance that "he who fights and runs away, may live to fight another day," one of the reformers, being of a practical turn of mind, suggested the appointment of a committee to formulate a plan of action with a view to bringing order out of chaos and providing a constructive program of legislation intelligently applicable

to the general municipal problems of the country. Out of this suggestion grew the "Municipal Program," which was formally promulgated by the League in 1899. This program consisted of a series of constitutional amendments suitable for incorporation into the constitutions of the various states and the form of a general municipal corporations law suitable for enactment by the state legislatures. While this program has not been adopted in its entirety in any state, the franchise provisions, with which we alone are here concerned, have in a considerable measure marked out the lines along which the progress of the last ten or twelve years has been made in this particular department of municipal affairs.

The leading franchise principles laid down in the constitutional amendments proposed by the League were the following:

1. That the legislature shall not pass any private or local bill granting to any private person or corporation "any exclusive privilege, immunity, or franchise whatever."
2. That the city's franchises shall be inalienable except by a four-fifths vote of the city council and with separate and additional approval by the mayor.
3. That no franchise shall be granted for a longer term than twenty-one years.
4. That the city may, in granting a franchise, provide for the acquisition of the plant by the city at the end of the franchise period without compensation, or may provide for the taking over of the property upon payment of a fair valuation not including any value for the franchise itself.
5. That provision shall be made in every franchise grant requiring the grantee to give efficient service at reasonable rates.
6. That provision shall be made in every franchise grant for maintaining the property of the grantee in good order throughout the franchise period.
7. That every public service corporation exercising a local franchise shall make to the city detailed quarterly reports of receipts, expenditures, debts and assets.
8. That the accounts of every such corporation shall be open to inspection by the city's finance department.
9. That municipal bonds authorized by a two-thirds vote of the city council, approved by the mayor and ratified by the people at the polls, and issued to provide for a specific undertaking from which the city will derive a revenue, shall not be included in the debt limit unless the enterprise fails to pay operating expenses and interest and sinking fund charges, and not even in that case if the bonds are secured solely by the receipts of the specific undertaking.
10. That every city may, by popular vote, establish in municipal affairs a system of direct legislation and a scheme of minority or proportional representation.

The principle last mentioned affects franchise matters only indirectly by affecting local governmental procedure. It is of great importance, however, as the possible requirement of a referendum on franchise grants might change completely the essential relations of the city to its public utilities.

In addition to the principles just enumerated as being set forth in the League's proposed constitutional amendments, certain supplementary franchise principles were included in the proposed municipal corporations act recommended by the League, as follows:

1. That the city "may, if it deems proper, acquire or construct, and may also operate on its own account, and may regulate or prohibit the construction or operation of railroads or other means of transit or transportation and methods for the production or transmission of heat, light, electricity, or other power, in any of their forms, by pipes, wires or other means."
2. That the city may acquire property within or without the city limits by purchase, by gift or by condemnation proceedings.
3. That the administrative service of the city shall be organized and conducted on the merit system under the jurisdiction of a municipal civil service commission.
4. That every franchise grant, in addition to any other form of compensation, shall provide for the payment to the city of a certain percentage of the grantee's gross receipts.
5. That the city controller shall prescribe the forms of accounts for franchise-holding companies, such forms to be as far as practicable uniform for all grantees.
6. That the reports of franchise-holding companies shall be public records and shall be printed in the city controller's annual report.[1]

508. Franchise provisions to the new Michigan constitution.—Although the scope of this book does not permit me to go into the provisions of the various state constitutions relative to franchises, it seems advisable to make an exception in the case of Michigan, both because the readjustment of franchise matters was perhaps the most important moving cause for the revision of the constitution and also because the constitutional convention, in the preparation of sections relating to cities and city problems, had the benefit of the services of Prof. John A. Fairlie, then of the University of Michigan, a recognized expert in the theory of administration and local government. An old provision of the Michigan constitution

[1] The "Municipal Program" may be found in the Proceedinigs of the Columbus Conference for Good City Government, 1899. It was issued in a separate book entitled "A Municipal Program," but this volume is now out of print. The "Program" itself has recently been reprinted, however, in Mr. Horace E. Deming's book, "The Government of American Cities."

forbidding the state to engage in any work of internal improvement had been interpreted by the state courts as prohibiting municipal ownership of street railways in Detroit. For a number of years Detroit had been trying to get the constitution changed so as to make "municipal home rule" in franchise matters possible. This right was finally secured when the revised constitution went into effect January 1, 1909.

One section of the new instrument provides that the legislature shall pass no local or special act in any case where a general act can be made applicable, and that "no local or special act shall take effect until approved by a majority of the electors voting thereon in the district to be affected." [1]

Another section provides that subject to other provisions of the constitution, "any city or village may acquire, own and operate, either within or without its corporate limits, public utilities for supplying water, light, heat, power and transportation to the municipality and the inhabitants thereof; and may also sell and deliver water, heat, power and light without its corporate limits to an amount not to exceed twenty-five per cent of that furnished by it within the corporate limits, and may operate transportation lines without the municipality within such limits as may be prescribed by law: Provided, That the right to own or operate transportation facilities shall not extend to any city or village of less than twenty-five thousand inhabitants." [2]

The constitution also provides that "when a city or village is authorized to acquire or operate any public utility it may issue mortgage bonds therefor beyond the general limit of bonded indebtedness prescribed by law: Provided, That such mortgage bonds issued beyond the general limit of bonded indebtedness prescribed by law shall not impose any liability upon such city or village, but shall be secured only upon the property and revenues of such public utility, including a franchise stating the terms upon which, in case of foreclosure, the purchaser may operate the same, which franchise shall in no case extend for a longer period than twenty years from the date of the sale of such utility and franchise on foreclosure." [3]

[1] Article V, section 30. [2] Article VIII, section 23.
[3] Article VIII, section 24.

The constitution also limits all franchises or licenses granted by municipalities to a maximum period of thirty years:[1] and provides that no public utility franchise, not revocable at will, shall be granted by any city or village unless approved by a three-fifths vote of the electors, including women taxpayers.[2] On the other hand, a similar vote is required before a city or village is authorized to acquire a public utility. In townships all franchises not revocable at will require a majority vote instead of a three-fifths vote of the electors.[3] Subject to the general laws of the state, cities and villages are authorized to frame, adopt and amend their own charters.[4]

Finally, the constitution expressly reserves to all cities, villages and townships "the reasonable control of their streets, alleys and public places," and provides that no person or corporation operating a public utility "shall have the right to the use of the highways, streets, alleys or other public places of any city, village or township for wires, poles, pipes, tracks or conduits, without the consent of the duly constituted authorities of such city, village or township; nor to transact a local business therein without first obtaining a franchise therefor from such city, village or township."[5]

509. Municipal "home rule" in franchise matters.—The ignorant, partisan or corrupt interference of state legislatures in the details of urban administration and the control of urban streets has given rise to a widespread sentiment in favor of "municipal home rule," so-called. It is often urged that, particularly with reference to the disposition of franchises and the undertaking of municipal ownership and operation, every city should have the right to do as it pleases. Even a dozen years ago this contention had considerably more force than it has to-day. The extension of urban transit lines into the suburbs and the rapid development of interurban street railways have removed almost every street railway system from the domain of purely local interest. It is obvious that as soon as a transit system, which both public interest and corporate advantage require to be operated as a unit, has spread out into the streets of two or more municipalities the absolute home rule of any one of them, even as

[1] Article VIII, section 29. [2] *Ibid.*, sec. 25. [3] *Ibid.*, sec. 19.
[4] *Ibid.*, sec. 21. [5] *Ibid.*, sec. 28.

to the streets within its own borders, is made impossible by the interests of the others in the maintenance and adequate development of the entire street railway service. The telegraph has never been a local public utility except in a restricted sense, and the great expansion of long distance telephone communication has made every local telephone system dependent for its usefulness upon its outside connections. It would be perfectly idle to maintain under these circumstances that the terms and conditions upon which the streets of each city or town may be used for telephone purposes should be wholly dependent upon the will of the local authorities of the particular political subdivision. Artificial gas may be regarded as a strictly local utility the control of which should be left to each individual community, but the opening of the natural gas fields and the construction of pipe lines hundreds of miles long across states and past numerous cities have destroyed urban independence in regard to natural gas franchises. It is contrary to the interests of the state that one city should act in the matter without reference to the interests of other communities, and the competition of many cities for a limited supply over which they have no control reduces them all to a condition of relative helplessness in dealing with the natural gas company. With the increase in the density of population and the size and number of cities the interurban or even state-wide importance of water supply development and sewage disposal plants has already been recognized in many quarters. Whether waterworks and sewer systems are owned and operated by the city itself or by private companies under franchises granted by the city, the day is past in most sections of the country when each community could safely be permitted to be a law unto itself in these matters. A few years ago electric light and power plants were local utilities, but with the development of water power and the transmission of electric current to distant points, each separate city has, to a considerable extent, lost control of the situation, and conversely has secured a legitimate interest in the terms and conditions of water power and electric distribution franchises granted by other communities.

In spite, however, of the rapidly increasing complexity of public utility interests and the necessary development of state control, the general theory of home rule remains sound if

properly modified and supplemented to meet new conditions. Every local community should undoubtedly have a reasonable control over the public streets within its boundaries and should also enjoy a sufficiently broad grant of powers to enable it to undertake the operation of public utilities directly if it desires to do so and is willing to submit to reasonable general restrictions as to the nature and extent of its indebtedness, the mode of preserving efficiency of administration and the procedure to be followed in determining important questions of public policy. Undoubtedly the city has a right to be protected from the wanton betrayal of its interests by an outside governing body like the state legislature. On the other hand the city has no legitimate claim to home rule that would permit it to interfere with the proper development of interurban utilities or to bind now the city of the future by ironclad grants or contracts running indefinitely or for long periods to come. After all, the day of walled cities is past, and now an urban community is primarily a congested spot on the state map, a center of population and industrial activity intimately related to the personal and property interests of all the citizens within its sphere of influence, which often extends to and beyond the boundaries of the commonwealth itself. Public utilities, although still comparatively simple industries, have grown far enough beyond merely local bounds to require complex governmental machinery to operate or regulate them.

510. What franchise limitations should be put into the state constitutions?—The constitutional provisions recommended by the National Municipal League have been described in a preceding section. The provisions actually contained in the new constitution of Michigan have also been set forth. The purpose of these and other constitutional provisions relating to franchise matters is two-fold. In the first place, experience has demonstrated the necessity for limiting the power of the legislature, as the general agent of the state for the exercise of sovereignty, to confer upon private agencies special privileges for the use of the public highways of particular localities. For example, the state of New York, after many years of legislative liberality towards particular street railway companies, amended its constitution in 1874 so as to forbid the legislature to authorize the construction

of any railroad in the streets except with the consent of the local authorities.[1] This amendment went even farther and stipulated that the consent of the majority in interest of the abutting property owners must be secured, or if that was impossible then the favorable determination of special commissioners appointed by the general term, now the appellate division, of the supreme court to pass upon the question whether or not the railroad should be constructed or operated. In the second place, it has often been found that private interests which had received special favors from the legislature were powerful enough to prevent even the enactment of laws giving to cities powers sufficiently broad to enable them to deal with public utility problems advantageously. It has been especially difficult for cities to get adequate authority to undertake municipal ownership as an alternative to granting franchises unfavorable to the city. Both the specific limitation of the legislature and the positive grant of powers to municipalities by constitutional enactment are cumbersome and likely to work badly in certain cases, but they have been rendered temporarily necessary by the imperfect functioning of our machinery of government, and particularly by the sinister combination of private business and private political interests that has exercised a dominating influence over legislation. By such constitutional provisions an effort is made so to distribute the functions of the government as to make the agencies of sovereignty more responsive to the will of the sovereign. Corrupt legislatures, not directly responsible to the people of particular cities, and not held to strict account for those of their acts in which their own constituents had no recognized interest, have been wilfully unwise in the exercise of their powers and wilfully unmindful of the interests of the communities primarily concerned in franchise matters affected by legislation.

Under existing circumstances I would suggest that the following guarantees and limitations should be given a constitutional status in the several states:

1. Every city to have the right to construct, acquire and operate public utilities if it chooses to do so.

2. No franchise to use the streets to be granted by the legislature by private or local bill.

[1] Article III, section 18, of the present constitution of New York.

3. If a debt limit is established, bonds issued for self-sustaining public utilities not to be included within the limit.

4. No term franchise to be granted for longer than thirty years.

5. The optional referendum on all term franchises to be guaranteed on petition of five per cent of the electors.

6. For the construction of street railways, the consent of the property owners, or the favorable determination of commissioners after a public inquiry to be required.

511. What franchise limitations should be put into the general laws of the state?—There are four classes of general legislation which have to be considered in any discussion of statutory limitations in connection with local franchise grants. These are (1) the general laws for the incorporation of cities and villages; (2) the general laws for the incorporation of public utility companies; (3) the general laws for the regulation of public utility services and rates, such as the laws establishing public service commissions; and (4) the general tax laws. Assuming that the principles suggested in the preceding section have been embodied in the constitution, I would suggest that the following additional matters be covered in the general laws:

In the general municipal corporations law, or for that matter in the city's special charter if it has one, provision should be made prescribing the procedure to be followed in the grant of franchises. Publicity should be secured by due public announcement of the pending application or scheme by advertisements in the newspapers and by posted notices in conspicuous public places, and, if it is a street railway proposition, at numerous points along the proposed route. After public hearings have been held and the form of the proposed grant whipped into final shape, the proposition should be held in abeyance by the council for at least four weeks before final passage. In cities where a city paper is published it is unnecessary and wasteful to require the publication of the franchise contract, unabridged, in the daily newspapers. A brief abstract with a reference to the issue of the city paper in which the form of franchise is published in full will be sufficient. In the preparation of the franchise form the city council should be required to consult the special officer,

commission or department charged with having intelligence on franchise matters. On final passage the ordinance or resolution should require the affirmative vote of at least a majority, perhaps two-thirds, of all the members elected to the council or other franchise-granting body. The separate approval of the mayor should also be required and his veto should be final, unless the council chooses to order a referendum, in which case approval of the franchise by a majority of the electors taking part in the election should operate to override the veto. The law should make the necessary detailed provisions for an optional referendum on the franchise grant, in case it is not vetoed, dependent upon the petition of a required percentage of the voters, to be filed within thirty or sixty days after the approval of the franchise by the mayor. In the case of a mere revocable permit or a franchise that by its terms may be revoked upon the city's purchasing the plant, provision should be made for the initiation of the revoking resolution or the purchasing ordinance, either in the council itself or by popular petition, with the right reserved to the petitioners to force a referendum if the council refuses to take action in line with their petition. This particular phase of the subject will be discussed more in detail in the next chapter. The general municipal law, or the special city charter, should confer upon the city specific authority to require reasonable extensions of service of all public utility corporations using the streets of the city, subject perhaps to an appeal by the companies to the state commission in the case of extensions requiring the investment of large amounts of new capital in more or less undeveloped sections. The city should be authorized to require the grantee to maintain the utility plant at the highest practicable standard of efficiency and to provide for the amortization of the capital invested. In general, the city should be given a free hand in imposing conditions upon franchise-holders, with a proviso to the effect that such conditions shall not be in conflict with the general policy of the state as expressed in its general statutes, whether passed before or after the grant of the local franchise. In case of apparent inconsistency between local and state franchise requirements, the matter should be determined by the state utilities commission. Ordinances providing for the construction or acquisition of pub-

lic utilities by the city, like franchise grants, should be subject to the optional referendum, and, as in the case of the revocation of franchises, the right to initiate them by petition should be reserved to the people.

The general laws providing for the incorporation of public utility companies should be as simple as possible and should be so drafted as to avoid any inconsistency with the franchise policy of the state as outlined in the constitution and elaborated in the general municipal law. In addition to the details of corporate organization, these laws should carefully define the powers of the several classes of public utility corporations, to be exercised subject to such consents and public regulation as may be provided for in other statutes. It is inexcusable for the state to grant a complete franchise for the use of the streets in the general charter of the corporations. In all cases further procedure in the way of local consents or the permission of a state board, one or both. should be required. The general corporation laws should lay down the policy of the state with reference to intercompany relations, leases, consolidations, mergers, interchange of trackage rights or the use of other facilities, mortgages, foreclosures, reorganizations, and reports to the city and state. All such laws should be subject to amendment or repeal in the discretion of the legislature.

The general regulatory statutes of the state should provide for a permanent expert commission to exercise the administrative jurisdiction of the state with reference to all public utilities. This particular subject will be discussed more at length in a succeeding chapter. Suffice it here to say that the general functions of such a commission should be to prescribe forms of accounts and reports; to regulate rates, equipment and service so far as the state assumes jurisdiction of those matters; to determine whether or not public convenience and necessity require that, so far as the state is concerned, a particular company should be permitted to operate; to pass on all local franchise grants and regulatory ordinances for the purpose of determining whether or not they conflict in any way with the general policies of the state as established in the law; to keep a complete file of all corporate documents showing the organization, rights, property and operation of every public utility company in the state; and

to pass upon all stock, bond and note issues and all intercompany leases or agreements.

The tax laws of the state should provide a uniform system for the valuation of public utility properties for taxing purposes and should provide for the equalizing of their burdens. I am inclined to the opinion that the state is justified in laying down absolutely the general policy of taxation to be applied to utility corporations and in compelling all local schemes of franchise compensation to square with it. This matter will be discussed more at length in the chapter on compensation and franchise taxation.

CHAPTER XL.

THE INITIATIVE AND THE REFERENDUM IN FRANCHISE MATTERS.

512. Reasons for participation of the electors in franchise granting.
513. The obligatory referendum on franchises.
514. The optional referendum on franchises.
515. The popular initiative in franchise granting.
516. Size of petitions, majority required, and qualifications of the electorate.
517. Attitude of public service corporations toward the initiative and referendum on franchises.
518. Attitude of the people toward political leaders under the initiative and referendum on franchises.
519. The initiative and referendum on questions relating to municipal ownership.

512. Reasons for participation of the electors in franchise-granting.—No one disputes the fact that a modern franchise, drawn up in the form of an elaborate contract, is a thing that should be subjected to the fire of criticism and publicity. It is, moreover, a very complex thing which is almost certain to need rewriting or revision in important particulars after it is first proposed. It is admirably suited to a procedure involving reference to a public utility commission or department, or a standing committee of the city council, to be threshed out with the help of public hearings, publication and negotiation. With the procedure properly guarded in the constitution, the general statutes or the city charter, there is no reason why every citizen or group of citizens desiring to take a hand in the formulation of the city's franchise policy should not have a chance to do so even without the initiative or the referendum. The influence of public utility corporations upon municipal politics has in many cases been so sinister, however, as to create in the popular mind a profound distrust of the city council in relation to franchise matters. The possession of a monopoly privilege for the performance of a public service in the streets for hire, under the imperfect conditions of public regulation which have prevailed, has in the past seemed so great a prize that the mere lodgment of arbitrary power in a board of aldermen to give or

withhold the privilege has been an extremely effective temptation to corruption. It is not necessary to describe again in this place the various temptations to public wrong which have already been gone over in the first volume of this book. Suffice it to say that the formal reservation of the right of the electors to participate in franchise-granting by means of the initiative and referendum is the outgrowth of the feeling that elected representatives cannot be trusted with arbitrary power to dispense special privileges to private individuals or corporations for profitable exploitation. No one can seriously dispute the fact that a city council or a municipal commission, even if composed of members of only average intelligence, is better qualified in a straightforward negotiation to work out the terms of a franchise than is the general body of the electorate. It follows that with the gradual improvement in the machinery for public regulation of operating utility companies and the gradual elimination of the value of franchises as special privileges, the temptations that warp the aldermanic mind and interfere with the consideration of franchise questions on their merits will be removed, and consequently there will be less reason for the actual submission of franchise contracts to popular vote for ratification or rejection. At the present time, however, there is still abundant reason for not conferring upon our agents, the aldermen, the ultimate authority to close franchise deals without giving us the last word in regard to them.

There always will be a reason for giving the owners of property abutting on any particular street something to say about the construction of a street railway in front of their premises. But the refusal of a particular abutter or, indeed, of a majority of the abutters to give their consent ought not to be a final bar against the construction of the railway. While the objections of property owners should be given considerable weight, the general interest of the community in having a comprehensive and convenient transit system should always be the ultimate determining factor in laying out street railway routes. If the property owner is actually damaged beyond having his feelings hurt, he should be compensated as a part of the cost of the enterprise.

513. The obligatory referendum on franchises.—The distrust of state legislatures and city councils has gone so far

in some states and cities as to cause the establishment of the rule that no franchise for the use of the streets can be granted without a formal vote of the electorate. This is the law throughout the states of Iowa and Oklahoma, as well as in the city of Nashville. In Colorado all franchises require the approval of the taxpaying electors. In Michigan, under its new constitution, franchises in cities, unless made terminable at will by the authorities granting them, must be ratified by a three-fifths vote of the general electorate plus women taxpayers. Doubtless, in some cases, notably in Des Moines and Detroit, the street railway companies are more unwilling to admit that their old franchises have expired or can expire than they would be if new franchises could be granted them without the approval of the people. It may be, therefore, that the incorporation of the obligatory referendum in the franchise laws of a state or a city will, in particular instances, make it more rather than less difficult to get a modern franchise policy agreed upon. In Detroit the street railway company is now claiming that its expiring franchises do not really expire; that only their terms and conditions expire. Aside from its effect in making the companies more tenacious of their claims under old grants, it may be doubted whether the obligatory referendum on all franchise grants is justified in theory. The policy is certainly not justified if it applies to all minor extensions and supplementary grants in cities where such grants are numerous. It should be noted, however, that where a correct franchise policy is followed, substantially no unimportant and fag-end franchises would be granted. There would be in each city one general, comprehensive franchise settlement for each utility, and extensions of service as made necessary by public needs would be provided for as a part of the main franchise, not as a series of new grants. Under such conditions there would be very few franchises to be voted on, and each one of them would be of sufficient general importance to appeal to the interest and intelligence of the voters. While, even under these conditions, the obligatory referendum may not be strictly necessary, there is no serious objection to it and it has the advantage of putting upon the people themselves the ultimate responsibility for the terms and conditions under which public utilities are to be operated. This responsibility is conducive to civic intel-

ligence and probably tends toward more harmonious relations with the companies and the men actively engaged in public utility service.

In cities where the theory of competition in public utilities still prevails so that a new grant has to be made every little while to secure extensions, which perhaps are confined to small sections of the city, the obligatory referendum would be a nuisance, unless the very bother of it compelled the adoption of a simpler and better policy in regard to franchise grants. In New York City, for example, it would be absurd to make the people vote on every one of the small and sectional franchises now granted from time to time, while on the other hand it would be of the highest value to require a vote of the electors on a standard form of street railway, gas, electric or telephone franchises, or upon a general settlement ordinance for any one of these utilities applying to the entire city.

514. The optional referendum on franchises.—In recognition of the fact that the direct participation of the electorate in franchise-granting is only necessary in emergencies, the optional referendum merely provides that after a franchise ordinance has been passed by the council it shall not go into effect for thirty or sixty days, in order to give the people a chance to say whether or not they wish to vote on it. In case it is a matter of grave importance in regard to which there is a sharp difference of opinion, the opponents of the franchise are likely to circulate petitions and secure the signatures of the required five, ten, fifteen or twenty per cent of the electors demanding the submission of the question to a formal vote. If such petitions are filed within the time required, the franchise, where the optional referendum is in effect, will not become binding upon the city until it has been ratified by the people. The possession of this option by the electors naturally makes the aldermen more careful and tends to minimize corruption and improvidence in franchise-granting. Why should a company spend money to buy aldermanic votes for a measure which the people have power to veto? Why should the aldermen through carelessness, indifference or desire to accommodate importunate franchise-seekers, grant franchises of great value without proper compensation or adequate safeguards, when it is within the power of the people,

on their own motion, to render the grant nugatory? It is the theory of the optional referendum that the right of the people to "butt in" on franchise questions is valuable as a club to hold over the city council, which might otherwise be led into temptation. It is not the theory that the people as a whole are necessarily wiser than a small representative body like the city council, but that the people whose interests are directly affected by a transaction are more likely to be loyal to those interests than anyone else is. The optional referendum is the string tied to every aldermanic grant, to prevent its going into effect until the parties most concerned have had a chance to pass on it.

Kansas City, Missouri, in its new freeholders' charter, drafted in 1908, contains a mixture of obligatory and optional referendum provisions. All franchises for more than thirty years must be submitted to the people; franchises running for thirty years or less may be submitted in the discretion of the city council, and must be submitted if demand is made by twenty per cent of the electors. Under this charter the 200-year terminal franchise described at length in a preceding chapter [1] was submitted to the electors at a special election September 9, 1909, and ratified by a vote of 24,593 yes, and 714 no. Three months later a 31-year extension of the Metropolitan Street Railway franchises, with readjusted terms and conditions, was submitted at another special election, and after a sharp campaign was defeated by more than 7000 majority.

The optional referendum where the option rests with the voters to demand the submission of a franchise, should not be confused with the permissive referendum sometimes provided for, where the option of submitting or not submitting the franchise rests with the city council. In Grand Rapids, prior to the adoption of the new Michigan constitution, the optional referendum had been provided for in the city charter to be used on petition of twelve per cent of the voters. Under this provision the Grand Rapids-Muskegon Power franchise had been forced to a vote by its opponents, but had been ratified by a considerable majority. In Detroit, on the other hand, although the council was not required by the city charter to submit franchise questions to popular vote, public

[1] *Ante*, chapter XXXVI, section 486.

sentiment in favor of the referendum had become so strong and so insistent that the council itself adopted a rule of procedure requiring that all franchise ordinances, after being put into their final form, be laid on the table for thirty days for the purpose of giving an opportunity for a demand for the referendum. Under this rule, if eighteen members of the council or five per cent of the electors asked to have a franchise go to the people, the ordinance would be submitted at the next election, and then, if approved by the voters, be put on final passage. I know of no instance in which the referendum was actually used under this rule, but in 1906 the council voluntarily submitted to the people a general street railway franchise settlement which had been negotiated by the mayor and appeared to be satisfactory to the aldermen. After a brisk campaign this proposed franchise, which had some very attractive features, was overwhelmed at the polls, and the mayor who proposed it was defeated for reelection.

In Illinois cities, under the so-called public policy law, twenty-five per cent of the voters may by petition force the submission to the electorate of any general question of policy. Although the people of Chicago had on several occasions gone on record in this informal way for immediate municipal ownership, they ratified by a considerable majority the general settlement street railway ordinances of 1907 and defeated for reelection the mayor who opposed the granting of the new franchises. In this case the referendum was brought about by petition in accordance with an option placed in the ordinances themselves by the city council as a concession to public sentiment.

In Cleveland, after Tom L. Johnson and his friends had been largely instrumental in securing the passage by the Ohio legislature of a law providing for the optional referendum on all franchise grants, the power so conferred upon the people was used to defeat Mr. Johnson's own policies. The Ohio law is peculiar and objectionable in that it allows the franchise to go into effect before the referendum is taken, an adverse vote by the people constituting a repeal of the grant. The Cleveland electorate by a close vote upset the holding company scheme under which the Cleveland street railway properties had been consolidated and leased to the Municipal Traction Company, the lease being bolstered up by

a so-called "security" franchise to the Cleveland Railway Company. This grant was a liberal one and was calculated to give the holding company organized by Mr. Johnson as a substitute for municipal ownership all the leeway necessary to assure its financial success, much more leeway in fact than the Johnson administration was willing to give any company for strictly private operation of the street cars. After this plan had been defeated at the polls and the whole street car situation thrown into worse confusion than ever, the Johnson administration made a new attempt at establishing a competing company to take over all the old franchises as they fell in from time to time and operate them on a three-cent fare basis. Again Mr. Johnson's opponents used the optional referendum to compel the submission of the Schmidt ordinance, which was designed as the opening wedge for the establishment of the new three-cent system, and at the election the ordinance was defeated. Soon thereafter Mr. Johnson, after eight or nine years of power, was himself defeated for reelection. In the meantime he had about completed negotiations for a general settlement of the controversy based on a renewal of the Cleveland Railway Company's franchises on the terms and conditions described in Chapter XXV of this book. The renewal franchise was in fact passed before the Johnson administration went out of office, but again a referendum was demanded by petition and in the campaign that followed Mr. Johnson threw his influence against the ratification of the ordinance. It was nevertheless ratified by a good majority in February, 1910. The optional referendum was used in Cleveland on still another Johnson franchise, namely, the 75-year subway grant to the Cleveland Underground Rapid Transit Railroad Company. In this case more negative votes than affirmative votes were cast, but the negative votes were not a majority of all the votes cast at the election, and the result was uncertainty and litigation. Just before going out of office the Johnson administration split the underground franchise into two grants and repassed them in a modified form. Again petitions were filed, but the new grants were ratified at the polls in November, 1910, by a considerable majority.

A review of the experience of these various cities with the optional referendum convinces the writer that while the vest-

ing of this power in the voters does not *necessarily* prevent the granting of improper franchises and may, possibly, even cause the defeat of meritorious measures in some cases, the general results are good. While neither the optional nor the obligatory referendum will prevent improvident grants where the whole community is obsessed with the idea of securing some immediate advantage, careless of future consequences, the optional referendum will prevent, almost if not quite as effectively as the obligatory referendum, the cynical betrayal of the public interest sometimes brought about by the cash alliance between the seekers and the grantors of special privileges.

515. The popular initiative in franchise granting.—Under the public policy law of Illinois the electors have what might be called an advisory initiative on general policies, including such matters as franchise-granting, but not upon specific, elaborated measures. In other words, one-fourth of the electors of Chicago might require the submission for an advisory vote of such a question as this: "Shall the City council grant a 20-year franchise to the Chicago Telephone Company, reserving to the city the right to purchase the telephone plant at the end of that term?" But the scheme of the law does not contemplate that the petitioners shall present an ordinance, all worked out in detail, to carry into effect the policy suggested. The vote is purely advisory anyway, and is designed merely to let the city council know the drift of public sentiment. Advice of this kind may be valuable at times, but it is not given with the same sense of responsibility that would attend a mandatory vote, and it is not likely to have much effect upon the action of a council that is corrupt.

The demand for the mandatory initiative, so far as franchises are concerned, is based on the theory that the council will sometimes refuse to grant franchises to new companies or to renew or extend the franchises of existing companies on a basis duly encouraging to the performance of necessary public services. In other words, if the council is controlled by an existing monopoly, it may refuse to introduce competition even for the purpose of compelling better service or cheaper rates. If on the other hand the council is controlled by the direct taxpayers it may go to the other extreme and

attempt to exact from the companies as compensation for franchise grants ruinous payments for the relief of taxes. Or the council, if actually corrupt, may annoy companies that are trying to perform public services by "holding them up" for graft. It often happens that the city council has a better idea of the public benefits of monopoly in the operation of a public utility than the people themselves have. This is partly due to the fact that the aldermen are more or less responsible for the care of the streets and know the disadvantages of having pavements ripped up by competing companies, and partly due to the fact that an existing company with its opportunities for educating the aldermen in committee or otherwise is generally able to picture the inconveniences of competition in a most convincing way. The people at large are slow to give up the fetish of competition as a means of regulating public utilities.

The most conspicuous examples of franchise grants proposed by popular petition and carried by popular vote have occurred in Denver and Portland, Oregon. In Portland a competing gas franchise was granted by the people to the Economy Gas Company at the election held June 3, 1907. This franchise provided for 95-cent gas, which was a lower price than the price then charged by the old company. Moreover, the old company was operating under a perpetual franchise, while the new grant was for twenty-five years only and reserved to the city the option of purchase at the expiration of that time. The people were also dissatisfied with the quality of the gas furnished by the old company. The people of Portland have also granted a competing telephone franchise. This grant was made at the election held June 5, 1905, to an individual who organized the Home Telephone Company. By this means the automatic system was introduced into Portland. The rates established by the new ordinance were not low as compared with the rates allowed to Independent companies in cities of the central states. This Portland franchise is of the modern type and appears to have been carefully drafted.[1] Unless the rates are subject to criticism, the only serious fault in the franchise seems to be the provision that the purchase price, if the city takes over the company's plant at the end of the franchise period,

[1] For a description of the franchise in some detail see *ante*, Volume I, section 159.

shall include "good will." At the same time it is expressly provided that no payment shall be made for franchise values. The granting of this franchise has subjected the Initiative as an institution to considerable criticism, but this criticism appears to be based almost entirely upon the undesirability of competition in the telephone business. It certainly cannot be claimed that city councils by contrast have generally been proof against the arguments of the Independent companies.

In Denver, on May 15, 1906, two important franchise renewals proposed by petition were ratified by the taxpaying electors by a close vote. These grants were to the street railway company and the gas and electric company. There were grave and apparently well-founded charges of fraud in connection with this election. It is asserted that the companies manufactured taxpayers by hundreds for the occasion by deeding vacant lots to their employees and the minions of the political machine. The election certainly demonstrated the practical fallacy of attempting to limit the suffrage on franchise questions to "taxpayers." The gas and electric franchise granted by the people of Denver at this time contained a provision ratifying what had been an unauthorized consolidation of electric interests and surrendering the city's right to purchase one of the plants. At the same time the franchise required the company to pay into the city treasury $50,000 a year for the full franchise period, twenty years, as compensation for the privileges granted, in addition to that portion of the company's gross receipts from the sale of gas and electricity derived from any excess of average rates over a specified schedule. For gas this schedule began at 95 cents per 1000 cubic feet in 1906, and gradually decreased to 75 cents for 1914 and thereafter. The schedule for electric current commenced at 7½ cents per kilowatt hour in 1906 and decreased to 6 cents for 1914 and succeeding years. The company was authorized, however, to substitute natural gas at 40 cents for artificial gas, and in that case no portion of the receipts would be payable to the city, other than the fixed annual payment. The street railway franchise granted by the Denver taxpayers included a confirmation of the Denver City Tramway Company's right to maintain its existing lines for a further period of twenty years and conferred upon the

company the right and imposed the obligation to construct a comprehensive system of extensions. The rate of fare was fixed at 5 cents for adults and 2½ cents for children between six and twelve years of age, with free transfers. The company was required to pay into the city treasury the sum of $60,000 a year as compensation for the grant.

The criticism leveled at these Denver franchises was based on the claim that they granted privileges of immense value for inadequate compensation and that their adoption by the taxpayers was secured through gross frauds. It has been alleged that the initiative and referendum features of the Denver charter, which was framed by a charter convention and ratified by the people in 1904, were fixed up by the representatives of the public utility companies so as to make them cumbersome and unworkable except on the initiative of some big special interest. For the initiative the signatures of twenty-five per cent of the electors were required. It is recognized as comparatively easy for a rich and powerful company, reaching out for new special privileges, to employ canvassers and secure signatures in large numbers to almost any kind of a petition. The Denver utility companies used the initiative effectively in 1906. By 1910, however, the independent citizens had become sufficiently aroused to use it. A charter amendment was proposed by petition and adopted at the election held May 10, 1910, reducing the number of signatures required on initiative petitions to five per cent of the electors. At the same time the plans of the Denver Union Water Company to secure a renewal of its franchise or to sell its plant to the city for an exorbitant price were defeated, and an independent scheme for the construction of a municipal plant by a public utilities commission unless the company was willing to sell for about half the price it asked, was proposed by petition and ratified by the voters.

Although the right to initiate general ordinances by petition may be of great value to the people of a city, there is one serious objection to the initiation of franchises in that way. The companies are thereby enabled to draft their own propositions and get them submitted to a vote without any chance for amendments. It is possible, therefore, that a franchise ordinance may be vicious in its details, or more probably in its omissions, and at the same time be made at-

tractive to the people by special features granting compensation, lower rates or other advantages, real or apparent. A franchise drafted by the company that wants it is likely to be an "unbalanced bid" for popular favor. The initiative was used in Los Angeles in 1909 to good purpose in establishing a city public utilities commission with investigating and regulatory powers. But, owing to the special interests at stake in franchise grants, the writer is convinced that every franchise proposed by petition should be submitted to the city council or to the local utilities board for report and recommendation before being voted on by the people. That would open the way for a careful inquiry into the details of the proposition and make it possible to have an alternative measure submitted at the same time, if thought necessary or desirable. It is not wise for a city to play with ordinances which, once they are adopted, establish binding contractual relations not subject to amendment or repeal except with the consent of both parties. For this reason every precaution should be taken in the formulation of franchise proposals, and no procedure should be allowed that will let a powerful special interest formulate a grant to itself and crowd it through in a hurry and without the handicap of detailed negotiation and discussion.

516. Size of petitions, majority required and qualifications of the electorate.—Usually a larger percentage of the voters is required for initiative than for referendum petitions. This policy is justified for two reasons. In the first place, only a short time is allowed for getting up referendum petitions, while there is no limitation of time in the preparation of an initiative proposal; in the second place, the "burden of proof" should rest on those who propose something new. A large enough petition should be required to indicate that there is a widespread interest among the people in the matter proposed. In case a special election is desired, a larger petition should be necessary, than in case the proposal is to be submitted at a regular election. For a regular election ten per cent is about right and for a special election fifteen or twenty per cent. To order a referendum on a grant passed by the council, at least thirty days should be allowed for filing the necessary petitions and the signatures of not more than five per cent of the electors should be re-

quired for the purpose, except possibly in small cities where a larger percentage requirement would not be unreasonable.

On a referendum it is difficult to see why more than a bare affirmative majority of the votes cast on the question should be required to ratify an ordinance. Nevertheless, we have an instance in Grand Rapids where the three-fifths requirement of the new Michigan constitution defeated a proposed franchise in the spring of 1910 that was found upon further investigation to have been in need of considerable revision for the protection of the public interests.[1] The vote in this case was 7261 for, and 6225 against the grant. In the case of franchises proposed by the initiative it is reasonable to require an affirmative majority of all the votes cast at the election, although some of the electors may have neglected to vote on the particular question at issue. If adequate provision is made for publicity, so that all the electors have a fair chance to inform themselves with reference to a proposition submitted to popular vote, there is certainly no reason for counting in the negative the qualified electors who fail to go to the polls.

The Denver experience already referred to indicates one of the practical objections to a limitation of the electorate on the basis of taxpaying qualifications. Such a limitation is illogical anyway. Even in a city of homes, where no congestion of population had ever been permitted, it would not be reasonable to limit the suffrage on franchise questions to freeholders or to persons whose names appeared on the tax roll. While franchises have a particular relation to land values, franchise policies should be determined not by the land-owners but by the land-users. The service rendered by public utility companies is of such universal interest to the people of a city, that it is undemocratic and contrary to the spirit and purpose of modern government, especially city government, to limit the franchise electorate any more closely than the general electorate. The special extension of voting privileges on franchise questions to taxpaying women provided for in the Michigan constitution is an illogical recognition of special interest in franchises due to one's being on the tax-roll. As a matter of fact it would be logical to extend

[1] This was an electric power franchise proposed to be granted to riparian owners as an inducement to them to let the city close the power canals along Grand river as part of a general scheme of flood protection.

the suffrage on franchises to all women even though they were not permitted to vote on other matters; for the terms and conditions upon which public utilities are supplied to the people affect women more intimately than many of the general functions of government. Housekeepers could perhaps vote on franchises more intelligently than any other class of citizens. The only important limitation of adult suffrage on franchise questions should be with reference to time of residence in the city. A residence of at least one year might reasonably be required as a qualification for voting on these matters.

517. Attitude of the public service corporations toward the initiative and referendum on franchises.—The attitude of those who have a special interest in government toward new modes of political action is determined by a consideration of the question as to whether or not these new modes can be used to extract from government the same advantages previously secured in other ways, or perhaps even greater advantages. While it is generally expected of public service corporations that they will at least "look with regret" upon any movement to give the electors more power in connection with franchises, this expectation is founded on the assumption that the companies have or hope to get special privileges not approved by public opinion and that instead of the "good will" about which so much is said in connection with appraisals the companies actually enjoy the ill will of their patrons. This assumption is undoubtedly correct in many cases, perhaps in a great majority of them, and the use made of the initiative by the Denver companies, for example, has tended to deepen popular distrust. In recent years, however, there have been instances where the companies, either by choice or by necessity, have adapted themselves to the new methods of political action, and have attempted to get their franchises by a direct appeal to the intelligence and civic pride of the people, generally using advertising space in the newspapers as the medium for their campaign of education. There is every reason to believe that honest dealing, frank publicity and contentment with legitimate profits from the performance of public service will, in almost every instance, win the good will of the electorate and give the companies an even better chance of continuing in business in peace and

prosperity than they have been able to secure from vacillating, fearsome or corrupt legislative bodies. In the long run, however, the publicity offered must be genuine. Tricks will not do, and the juggling of public utility securities for the building up of personal fortunes overnight will not conciliate a suspicious and resentful popular majority.

As an illustration of how a company, recognizing the new order of things, may go about the task of getting new franchises, we may cite the recent experience of the Oklahoma Gas & Electric Company of Oklahoma City, owned by the engineering firm of H. M. Byllesby & Company of Chicago. The Oklahoma company had been taken over by Byllesby & Company in 1904, when both the gas and the electric plants were being operated under 21-year franchises granted by the mayor and councilmen of Oklahoma City in 1902.[1] In 1906 the electric franchise had been radically amended,[2] and a new franchise authorizing the introduction of natural gas into the city had been granted.[3] The gas and electric ordinances were much alike in their main provisions, and accordingly, for the illustration of the point here under discussion, we may confine ourselves to the electric franchise. Although this franchise was originally granted for a period of twenty-one years, the city reserved the right to terminate it and take over the electric plant at the end of the first ten-year period or at the end of any five-year period thereafter, at a price to be fixed by appraisal. The appraisers were to be electrical engineers "of well-known experience and ability," being neither residents nor taxpayers of the city, nor in any way interested in the purchase of the plant. As amended in 1906 this franchise provided for flat rates to business houses of $1 per month for each 16-candle power lamp operated on a midnight service and $1.25 per month for all night service. The residence rate was fixed at 10 cents per kilowatt hour with a minimum charge of $1 per month. The franchise also provided that no deposit should be required of consumers except to the extent of one month's estimated charges in the case of transients and irresponsible people. Meters with a visible indicating dial were to be used and they were to be placed so as to enable the consumer to keep track of the

[1] Ordinances No. 283 and No. 284.
[2] Ordinance No. 603. [3] Ordinance No. 665.

readings. Indeed, the company was required to give each consumer an instruction card to teach him how to read the meter. If the consumer thought the meter was inaccurate, the company was to test it, and if the consumer was still dissatisfied the city electrician was to test it. If the meter was then found to be fast, the company was to refund to the consumer all overcharges and pay the city a fee of one dollar for the test. Service was to be continuous, all day and all night, and lamp renewals were to be free, at least to consumers of whom deposits were required. In 1909 the company desired to make extensive changes in its plant, and for the purpose of making it easy to raise the necessary funds the company set about getting a new franchise containing certain important modifications of its rights and obligations. It should be noted that Oklahoma City has been going through a period of extraordinary development during the last decade, the population having increased from 10,037 in 1900 to 64,205 in 1910. It may well be that the company found it difficult to keep up with the demand for electric service. At any rate, under the direction of the publicity department of Byllesby & Company's Chicago office, the company hired space in the Oklahoma City newspapers and told in a series of articles the story of the development of the gas and electricity business of the town, how in the early years money had been lost in premature attempts at public service and how the company in recent years, under the control of Byllesby & Company, had been hustling to keep its plant up with the growth of the city's business and population. The point of the appeal was that the people should coöperate with the company by granting a new franchise on such terms as would make it possible to float new securities to procure funds for needed development. After this campaign of education had been carried on for a while the company caused the new gas and electric franchises desired by it to be introduced into the city council and passed by that body, subject to the approval of the electors as was required by the constitution of Oklahoma. At the special election called for the purpose the new grants were ratified by a large majority.[1] The new electric franchise secured in this way differed in a

[1] The ordinances were first submitted July 9, 1909, when they were ratified by a vote of about 5 to 2. They were resubmitted in a somewhat modified form October 20, 1909, and were then ratified by a vote of more than ten to one.

number of important respects from the old one that was displaced by it. In the first place the company's rights were renewed for a period of 21 years and the city gave up, until the expiration of that time, its option to purchase. Under the old franchise this option would have been available in 1912 and at five-year intervals thereafter. The new grant postponed it till 1930 and provided that if it was not exercised then, the franchise should continue four years longer and the option of purchase should be good at the end of each of those years until exercised. The new franchise extended specifically to the city limits as already existing and as thereafter at any time established. The company was also authorized to serve territory beyond the city limits. A general rate of 11 cents per kilowatt hour, with a discount of 10 per cent on bills paid within ten days after becoming due, was established for both business and residence lighting, but the company was specifically authorized to discriminate by charging a less rate or rates for electricity "consistent with the uses to which it may be put, and to enable such grantee to successfully compete with like systems or works or other agencies employed in lighting, heating, power or other uses to which electricity may be put." Moreover, the company was authorized to make a minimum charge of one dollar a month for each horse-power of the power capacity connected and for every kilowatt of lighting capacity connected. It should be noted that one kilowatt would supply twenty 16-candle power lamps. The company was also authorized to require of any consumer a deposit equal to the estimated charges for one and one-half months' service, but was required to pay five per cent interest on all such deposits. If meters, when tested, were found "within two per cent correct either way," the readings would stand; otherwise they would be corrected for the month preceding the test. In case the consumer appealed to the city electrician from the company's test of a meter, a fee of one dollar would have to be paid to the city either by the consumer or by the company according as the company's test was found correct or incorrect.

It was specifically provided that the company should not be required to furnish or install any wiring or appliances within the consumers' premises. Power was expressly reserved to the mayor and council to impose "needful and rea-

sonable regulations" for the protection of the interests of the people of the city, and among other things, "after full hearing to require extensions of service where it can be done without financial loss to the grantee." This last provision was the only point of superiority in the new ordinance over the old one from the city's standpoint, though a careful comparison of the provisions of the two franchises as above described shows seven or eight rather important advantages secured by the company under the new grant. If the success of the publicity method in this case is typical of what companies generally may secure through the referendum, they certainly can have no reason to complain of laws requiring the participation of the people in franchise granting. There is ground for suspicion, however, that Oklahoma City was so busy growing in the year 1909 that it did not scrutinize the new franchise grants as carefully as other cities would under ordinary conditions.

518. Attitude of the people toward political leaders under the initiative and referendum on franchises.—Perhaps there is no other department of municipal politics in which strong, clear-headed and persistent leadership is so necessary as in franchise matters. Under private ownership of public utilities, even at its best, the adequate protection of the public interests requires eternal vigilance, keen insight and undaunted courage. The public welfare is pitted against profit-hunger in a perennial, never-settled contest. The corporations attempt to run the utilities for private gain; the city and state authorities try to compel the corporations to run them for public advantage. If good results are to accrue to the people from this conflict, their interests should be represented as steadily, as ably and as forcefully as the interests of the corporations, which never sleep. The bearing which the direct participation of the people in franchise-granting may have upon political leadership and the continuity of public policies is, therefore, a consideration of first rate importance in this discussion.

Experience with the initiative and referendum in franchise questions has been too limited, however, to warrant positive conclusions in this matter. In Detroit a mayor representing the dominant party and starting off with an excellent opportunity to make a career for himself, went down with the

franchise he had negotiated, although if the council had dared to pass it without a referendum and before its provisions had been thoroughly analyzed in public discussion the mayor's political prestige might possibly have been greatly increased by reason of his "successful settlement" of the street railway franchise. In Kansas City, also, a mayor's personal defeat was presaged by the defeat at the polls, after a vigorous campaign, of a general street railway renewal ordinance approved by his administration. But these particular instances do not illustrate the fickleness of the people in refusing to support the franchise policies advocated by seasoned and established political leadership. They are rather instances of the refusal of the people to depart from established policies for the sake of securing certain immediate and perhaps specious benefits offered by the companies as an inducement to the granting of great privileges

The experiences of Edward F. Dunne as mayor of Chicago and of Tom L. Johnson as mayor of Cleveland are far more significant. Mayor Dunne was elected to carry out a definite street railway policy which had already been approved by the voters of Chicago at referendum elections. Yet, when he found it impossible to establish municipal ownership of street railways at once, owing to legal and financial obstacles, he was led to propose a franchise renewal along lines that would definitely open the way for municipal ownership in the future, whenever the city could get the necessary funds, and that would in the meantime secure the rehabilitation of the existing street railway system so as to furnish immediate relief in the matter of service. But when, after difficult and protracted negotiation, the special traction counsel appointed by him had arranged with the companies for a settlement along these lines, Mayor Dunne vetoed the settlement ordinances, and when they were passed over his veto he called for a referendum. At the ensuing election he opposed the ratification of the ordinances and at the same time asked for another term as mayor. The result was that the ordinances were approved and the mayor was retired from public life in favor of a reactionary who stood for radically different ideals in public life and a radically different attitude toward public utilities. If Mayor Dunne had supported the ordinances as embodying the nearest practicable approach to the

policies he had been chosen to carry out, doubtless he would have been reelected and thus would have remained in a position where he could steer the official activities of the city toward the ultimate realization of the policies he represented. As it was, the people of Chicago, though no doubt greatly influenced by the promise of immediate improvement in the street car service in case the new franchises were granted, cannot be said to have reversed themselves on the question of municipal ownership so much as to have rejected vacillating leadership. Undoubtedly great sums of money were spent and tremendous pressure was brought to bear by vested interests to secure the ratification of the ordinances Mayor Dunne opposed, but the vote in their favor was too decisive to be construed otherwise than as representing the deliberate judgment of the majority of the electorate. Indeed, except for the unexpected decision of the Illinois supreme court, handed down a short time after the ratification of the franchises, to the effect that street railway certificates issued under the Mueller Law would have to come within the municipal debt limit, the ordinances would have smoothed the way for the establishment of municipal ownership in the comparatively near future if the city continued to desire it.

Mayor Johnson's political downfall in Cleveland followed soon after the first practical application had been made of the policy for which he had long been fighting, with the support of a loyal popular majority. In the spring of 1908 the old company gave up the struggle to the extent of leasing its entire system to the holding company organized by Mr. Johnson to operate the street cars for the city on the basis of three-cent fares. To bolster up this lease Mr. Johnson gave the old company a "security franchise" on even more liberal terms than the company had demanded in case it was permitted to continue to operate. The continuation of the lease was dependent upon the city's renewing the security grant from time to time so that it would always have at least fifteen years more to run. If at any time the required renewal was refused or delayed, the lines would be immediately restored to the old company with the right to operate them for the full period of fifteen years at the maximum rate of fare provided in the security grant. As a result of econo-

mies in an effort to make three-cent fares pay and of the hostility of the employees, which was no doubt fomented to some extent by persons interested in the old company, service under the lease was curtailed and great dissatisfaction arose. A referendum was called on the security franchise and it was rejected by the voters several months after it had gone into effect. This was the beginning of Mayor Johnson's fall. The people simply refused to ratify an arrangement which depended for its success on the uninterrupted control of public functions in the city of Cleveland by the group of men surrounding Mr. Johnson for an indefinite series of years. He had asked the voters to take too much on faith. The comparative failure of operation by the holding company at a three-cent fare, no matter how many incidental causes may have contributed to it, could not be excused in the face of Mr. Johnson's confident promises and his well-known experience and skill as a street railway magnate. After this first defeat he tried to renew the fight against the old company by means of a competing grant to a three-cent rival, but the people vetoed that also. Then, on the eve of his last contest for reelection he announced that a tentative settlement had been reached on the so-called "Tayler plan," by which the old company would get a renewal of its franchises to be operated at such a rate of fare as would guarantee a fixed return upon the investment, and the city would get the right to take over the property at some future time when the legal obstacles had been cleared away. Cleveland had become weary of Mr. Johnson's leadership and so refused to give him another term in the mayor's office. The settlement he had promised passed the council and was signed by him before his successor came into office. Before the referendum vote was taken, however, Mr. Johnson as a private citizen came out against the new ordinance. Nevertheless, it was ratified by a decisive majority. Mr. Johnson's street railway program in all his years of leadership in the civic affairs of Cleveland had called for immediate three-cent fares and ultimate municipal ownership. Both are provided for in the Cleveland settlement ordinance now in force in Cleveland.

Both Mayor Dunne and Mayor Johnson won tremendous victories for their policies, but as they were not satisfied with their own successes, the leadership which they might

have retained was transferred to other men, even at the risk of their leading backward.

519. The initiative and referendum on questions relating to municipal ownership.—Whatever may be thought of the desirability of permitting the people to take a hand directly in granting or vetoing franchises, there is a general consensus of opinion to the effect that the construction or acquisition of public utilities by a city should not be undertaken without the direct approval of the electorate. The issue is likely to be presented in two or three ways. First, the general project of building or buying a plant for municipal operation may be submitted. Then the question of authorizing the issuance of bonds for the purpose may be referred to the people. Under the Mueller Law in Illinois a special three-fifths majority is required to authorize municipal operation of street railways as contrasted with municipal ownership and leasing to a private company. Sometimes a two-thirds majority is required for the approval of bond issues. Where municipal ownership and operation is a practicable alternative to the granting of franchises, open to the choice of the people, this fact is likely to have a marked influence on the character of the franchises proposed and of the franchise policy adopted. With slight modifications, the same principles which govern the application of the initiative and referendum to franchise granting should also govern their application to municipal ownership. It ought to be as easy for the people to inaugurate the policy of the exploitation of public franchises by public agencies as it is for them to confer franchise rights in the public streets upon private companies. It ought to be as easy for the people to veto municipal bond issues for new undertakings as it is for them to refuse their assent to the grant of special privileges which are to be made the basis of stock and bond issues by private companies.

CHAPTER XLI.

SUPERVISION OF LOCAL UTILITIES BY STATE COMMISSIONS.

520. Nature and extent of the jurisdiction properly assumed by the state.
521. Determination of public convenience and necessity.
522. Control of extensions and abandonment of service.
523. Approval of intercompany agreements and stock control.
524. Approval of stock and bond issues.
525. Uniform accounts and forms of reports prescribed.
526. The filing of corporate documents and records required.
527. Investigation of accidents and enforcement of safety regulations.
528. Requirement that adequate service be rendered.
529. Regulation of rates.
530. Relation of state utility commissions to local authorities.

520. Nature and extent of the jurisdiction properly assumed by the state.—All public utilities except the telegraph are local in the sense that they go *to* the people to serve them. They enter into people's houses or pass in front of their doors. The adequacy and cheapness of public utility services in each particular neighborhood determine in large measure the price of land and its immediate adaptability for residence or business uses. No public function has a more intimate and local bearing upon the lives and welfare of the people in their homes, workshops and places of business. Yet, as we have already seen, there has been within the last few years a remarkable development of the interurban and state-wide relations of most of the utilities. When a company operates over a unit of territory extending across the boundaries of local political subdivisions there at once arises the necessity for supervision by a public authority having jurisdiction over the whole area covered by the company's operations. In some cases, this supervision might be undertaken by the township or county, if either of those municipal divisions had an administrative organization adequate for the purpose. But they have not. The next governmental unit to grapple with the problem of supervising public utilities after they have outgrown the jurisdiction of the

city is the state itself. Moreover, inasmuch as practically all public utilities are operated by corporations, which are the creatures of the state, all those matters in which the regulation of utilities is bound up with the regulation of corporations naturally fall within the jurisdiction of the state government even though the particular companies affected operate only in single municipalities. Everything affecting the organization, the life, the powers, the obligations, and the intercorporate relations of public utility companies as such falls within the original jurisdiction of the commonwealth. Every interurban relation of a public utility, whether it is being operated by an individual or by a corporation, may be said to fall within the commonwealth's acquired jurisdiction. If there is one principle of public utility operation more firmly established than any other, it is perhaps the principle of unified operation in the particular territory covered. The extent of this territory is ordinarily determined by the limits of an urban community or population center, but in the case of a territory supplied by a natural gas or an electric company, the area of influence may be determined by the location and capacity of the gas fields or of the power development. But in whatever way a utility's territory may be delimited, the service within that area should be developed as a unit. Public supervision, naturally, must respect this necessity. Hence what I have called the acquired jurisdiction of the state is growing rapidly in importance under prevailing conditions of public utility development.

521. Determination of public convenience and necessity.— Until comparatively recent years the control of public service corporations assumed by the state was exercised in most of the commonwealths almost exclusively by the legislature. A company's powers and obligations were described more or less minutely either in a special legislative charter or in a general law providing for the incorporation of all companies of that particular class. Little or nothing was left to the discretion of state administrative officials. Massachusetts has been a pioneer in the establishment of state commissions with authority to exercise a continuous supervision over public utility companies, and now almost all of the states have railroad commissions with more or less

extensive powers while a few states have gone to the extent of creating public service boards with sweeping powers of regulation as respects the whole field of public utilities.

The first problem of state supervision after the legislature has passed the job over to the administrative authorities is the determination, with reference to any particular company desiring to enter the public utility field, as to whether or not public convenience and the necessities of the community demand the services of the new corporation. The determination of this question involves different considerations in different cases. If the community where the company proposes to operate is not already served with this utility, the question is whether or not there is sufficient immediate or prospective demand for the particular service in question to justify the construction of a plant to supply it. If the kind of utility to be supplied is still in the experimental stage, the state commission must pass upon the question as to whether the experiment will be safe and gives sufficient promise of success to warrant the inconvenience made necessary by the opening of the streets for the placing of fixtures. Where the community is already served with the utility, a fundamental question of public policy is involved. Shall the state protect monopoly or shall it encourage competition? While the legislatures have generally been favorable to competition, there is reason to believe that state commissions, with a better comprehension of the nature of public utilities, will go as far as they reasonably can in maintaining monopoly. It is not to be desired that the principle of monopoly should be established as a hard and fast rule of law, for the power to admit a competing company is one of the most powerful weapons that a state commission may have to compel a company already on the ground to render adequate and humble service.

It may be said with reasonable assurance that a state public utilities board should be authorized to determine in the case of every public utility enterprise, before it is launched, whether or not public welfare will be endangered if the enterprise is allowed to come to fruition. The actual result of the lodgment of this authority in the hands of an expert body of men will be to check the application of the competitive theory in the realm of public utilities, where it

leads only to waste and disaster. The granting of a certificate of public convenience and necessity by a state board ought not, however, to render unnecessary the securing of the consent of the local authorities, except in cases where the refusal of such consent would block the development of an important public utility service desired by adjoining communities.

522. Control of extensions and abandonment of service.— With the expansion of population centers and the natural development of public utility services, a company often desires to overflow from the territorial area originally occupied by its fixtures. In all such cases the permission of the state board should be required the same as when a new company is trying to get started. In general, the policy of the state will undoubtedly be to encourage such extensions of service. It is generally better that extensions of street railway lines should be constructed by the company already in the field rather than by a new company, whether a subsidiary or an independent one. The same is true of extensions of gas, telephone and electric service into adjoining areas. Indeed, the power should rest in the state commission to require reasonable extensions of a public utility service when petitioned for by the local authorities.

In some instances companies, especially street railway companies, desire to abandon portions of their route either before construction is completed or after operation has proved to be unprofitable. Except where traffic conditions have radically changed through the shifting or concentration of population or business, there is usually no reason for the abandonment of a street railway route that was worthy of approval in the first instance. The state commission should not permit a company to assume obligations that it cannot and perhaps does not intend to fulfill. The failure of a company to complete the construction of its selected route or to extend its fixtures throughout its area of authorized service as soon and as fast as public need demands it, should be ground for the forfeiture of its charter unless it can make most excellent excuses. In no case should a company be authorized to abandon all or any portion of its service without the consent of the local authorities, except possibly in the case of a failing supply of natural gas or water power where necessity or the general interests of the state may require.

523. Approval of inter-company agreements and stock control.—The family and social relations established by the artificial persons created by the state to render public services have been scandalous in the extreme. Polygamy is the least shocking of their offenses. Their lust of profit and power has led them to practice slavery, cannibalism, and all the most horrible customs of savagery. The state, which is responsible for bringing these creatures into existence, must also civilize them and give them a decalogue written on tables of stone. The most baffling difficulty in the way of public control of utility corporations lies in the diabolical cunning of their inter-corporate relations. Often the location of responsibility is wholly concealed. Experience demonstrates the necessity of having some state board clothed with discretionary power to approve or reject all proposed corporate alliances, whether to be effected by merger, by lease, by trackage agreement, by stock control, by holding company or what not. Consolidation of companies engaged in the same kind of public utility service, whether in common or in adjoining territories, is to be encouraged if carried out in a legitimate way and with the consent of the state and local authorities. Everything that tends to unity of operation within a normal area of distribution is to be welcomed. But every inter-company agreement of any nature looking to an interchange or common use of franchise rights should immediately see the light of day and be submitted to the state and city authorities for approval. This is especially important in its bearing upon the public control of capitalization, corporate responsibility for safe and adequate service and the enforcement of honest accounting and financial publicity. While monopoly in the operation of any one utility in a single community is under proper conditions of public control desirable, the combination of different utilities should not be permitted except in cases where consolidation will effect natural economies that cannot be obtained in any other way. So, also, the consolidation of companies supplying the same utility in different centers of population should not be authorized except where their union is made necessary by a common source of supply or other fundamental conditions. Where a large territory with a practically continuous urban population is split up into several political subdivisions, or where a common source of supply

brings a number of physically separated communities into one sphere of influence, the maintenance of a separate operating company in each political subdivision may tend to simplicity of control by the local authorities, if the state board maintains a strict supervision over the contracts between the several operating companies and the one holding or manufacturing company that unites them into a single system. Inter-company agreements are now often made for the very purpose of confusing the public authorities and withdrawing from official scrutiny and supervision all or a portion of the vital activities of the agency charged with rendering a public service. No lease, merger, agreement or community of interest between companies should ever be tolerated by the state if its effect or its purpose is to render uncertain or difficult the supervision of the companies' activities by the governmental authorities either state or local. It is a well-nigh hopeless spectacle to see a state commission reaching out in a vain effort to lay hands upon the elusive creatures which by drawing a mystic circle around their substantial selves keep the state forever playing with their shadows.

524. Approval of stock and bond issues.—The abuses of overcapitalization are naturally a subject for state regulation. The corporations are not created by the city, and the control of stock and bond issues is essentially a corporation rather than a franchise problem. Certain general rules governing the issuance of corporate securities will ordinarily be laid down in the acts of the legislature. It is one of the functions of state utility boards to apply these principles to particular cases. It is sometimes urged that the state commission should go even further and interpose its judgment between a company's board of directors and an unwise use of capital. The more conservative view is that the law should prescribe the purposes to which a company's capital may be devoted and that the commission, in passing upon particular issues of stocks or bonds, should confine itself to the determination as to whether or not the proposed uses to which the company wishes to devote the funds obtained by the sale of securities are within the limits set by the law. The law may prescribe that not more than one-half or two-thirds of a company's securities shall be in the form of bonds. It may prescribe that no securities, either stocks or bonds, shall be issued

for less than par in cash or its equivalent. It may prescribe that additional issues of stock, shall first be offered to the existing stockholders, either at par or at an appraised valuation, and if not taken shall be sold at auction. It may provide that stocks and bonds shall never be issued on account of franchise or development values, good-will or any other intangible asset.

The chief purpose of the regulation of capitalization is to protect investors, eliminate the speculative element in public utility securities and keep the development and operation of the utilities under the control of persons whose primary interest is to render successful service. To accomplish these purposes the market value of the securities should be kept as close as possible to their par value. This can be accomplished in the first instance by insisting that behind every dollar of capitalization there shall be a dollar's worth of physical property. The state commission should not only prescribe the purposes for which stocks and bonds may be issued in any particular case, but should also see that the funds secured by an issue so authorized are actually devoted to the prescribed purposes. This involves a careful supervision of book-keeping. Measures should also be taken, either by a supervision of the company's construction contracts or by an audit of its expenditures to prevent excessive costs. Having passed, in the first place, on the public convenience and necessity of the company's enterprise as a whole, having then determined the amount of capital stock and bonds that the company may issue and the kind of things for which they may be issued and, finally, having supervised the expenditure of the capital funds to insure honest construction costs, there is not much left for the state to do in the matter. Of course, the question whether certain changes in equipment shall be made, whether certain locations for power plants or manufacturing works shall be chosen, whether certain policies of development shall be followed, is still left in some measure to the discretion of the company, but even these matters are subject to public control from the standpoint of adequacy, safety, convenience and non-interference with the rights of others. Indeed, it is hardly possible to accomplish the purposes for which public supervision of stock and bond issues is established without frankly conferring upon the state commission

full power to pass not only upon the kind of things to which capital may be devoted but upon the necessity and wisdom of the particular investments proposed. Doubtless, a wise commission would leave some leeway of discretion to the company, but the commission's certificate of approval should at least be a guaranty that the capital will be or has been honestly used for lawful purposes and will not be or has not been spent on particular plans which are clearly impractical and profitless. In every case the commission should require full publicity as between the company and the investor. It would be a strange travesty on governmental efficiency, if by careless approval of capitalization the commission should give a nominal guaranty that would enable a company to raise funds for clearly unprofitable uses. One of the commissions's gravest problems arises in connection with the reorganization of companies which were originally capitalized without adequate supervision. The part of wisdom, however, in such cases is to apply the knife with absolute firmness so that the water will all be drained off and the new capitalization reduced to correspond with present value of physical property. In case of unusual prosperity, the market value of securities should be kept near to par by reduction of rates, by improvement and extension of service, or by both. On the other hand, adequate rates should be authorized, even if an increase is necessary for the purpose, to give a reasonable return upon honest capital wisely invested in a utility wisely operated and rendering adequate service.

525. Uniform accounts and forms of reports prescribed.— Not many years ago publicity of public service corporations' accounts was practically unknown in the United States. The fundamental necessity of the state's getting knowledge about their business as a prerequisite to effective regulation, has given the movement for publicity of accounts a great impetus in recent years. But publicity of the accounts kept by the companies is of comparatively little value unless the accounts are kept right. This consideration has led to the exercise by the state of its authority to compel all companies operating the same kind of utility to keep their books on a uniform plan prescribed by the proper public body. While it is desirable, in the absence of adequate regulation of this matter in any particular commonwealth by the state authorities, that the

franchise granted by the city should reserve to the municipal financial officer the right to prescribe forms of account and to require regular financial reports, this function naturally belongs to the state government. Neither the state nor the city can maintain rational relations with the companies except on the condition that the books be kept right and that full reports be made. It is in the intimate control of the companies' financial records that the body blow is struck at all the principal abuses of corporate management. It is correct bookkeeping that eliminates fictitious assets, reveals the cost of construction and operation and brings to light the earning power of the plant and its standard of maintenance. Regulation of rates, return on capital invested and purchase price of the property, all depend upon what the accounts show. It is especially important that uniform accounting and reporting should be prescribed for the entire state so that the financial statistics of companies operating in different cities and under different conditions may be compared. The annual reports giving detailed statements of assets, capitalization, earnings, expenses, equipment and service rendered should be published in form available for distribution. There are no "business secrets" in public utility operation that should be respected. There should be no rivals to take advantage of full publicity; for each utility should be conducted as a monopoly in each separate area of service. Moreover, the business is public in its nature and lives by its public franchise. However a state commission may fail in other ways, if it is successful in compelling the companies to use an honest and adequate system of bookkeeping and to make full, accurate and intelligible public reports, its most important function will have been fulfilled.

526. The filing of corporate documents and records required.—As another important factor in making the regulation of public service corporations effective, a state commission should keep a public document file, carefully indexed and readily accessible for general use, containing verified copies of all certificates, maps, leases, deeds, agreements, mortgages, franchises and other papers constituting a full record of each company's corporate rights and property. It is desirable that copies of all or most of these documents should also be filed with the proper authorities of the cities in which the com-

panies severally operate. But the jurisdiction of the state commission being all-inclusive, its document files should be independent of the various local files. The possession of these records is only second in importance to uniformity and publicity of financial accounts as a factor in supervision. When competition has been eliminated and multifarious original franchises surrendered for one comprehensive grant for each utility, the practical importance of the public document file will be considerably decreased. At least, the documents will be less numerous, and the task of analyzing and understanding them will be less onerous.

527. Investigation of accidents and enforcement of safety regulations.—Cities almost invariably require in their franchise grants that the persons or corporations exercising special privileges in the streets shall assume liability for all damages to persons or property resulting from the construction or operation of their plants and fixtures. Such a requirement furnishes a financial motive to the franchise holders to be as careful as possible of the rights of others, but in case the property is being operated for speculative purposes or in case the expense on account of personal injury claims is merely added to operating expenses and the utility is relieved of other burdens because of high operating expenses, this motive of self-interest is weak and wholly insufficient. The Metropolitan Street Railway system in New York City has annually for many years set aside on its books ten per cent of gross receipts to take care of claims arising from personal injuries. Other surface street railway systems in New York City are actually paying out from three to eleven per cent of their income for these purposes. On the other hand, from less than one to one and one-half per cent is sufficient in the case of subways and elevated roads. A large portion of these accident charges goes to the legal "army of defense" which is an important part of every street railway company's outfit. Obviously, personal injury claims are a less important item in the financial affairs of gas, electric, telephone and water companies than in the case of railways. It cannot be doubted that the state, from which the corporate existence of the public utility companies springs and which is ultimately responsible for the general uses to which the highways may be put, is justified in taking jurisdiction of public utility accidents and in requiring

the companies to take all necessary precautions both in the matter of equipment and in the mode of operation to reduce to a minimum the loss of life, limb and property incident to public utility operation. For this reason all the companies should be required to make an immediate report of accidents to the state commission and that body should investigate the serious ones for the purpose of determining causes and fixing responsibility. The state should undoubtedly assume an intimate jurisdiction over the safety appliances to be used and the rules of operation to be put in force. This involves the question of the underground conduit system as opposed to over-head wiring for all classes of utilities using electrical current; the question of the kind of brakes, wheelguards and fenders to be used on street railways; the separation of grades; and questions relating to the speed limit of cars, the voltage of electrical distributing currents, the pressure in gas mains, adequacy and pressure of water supplies, and so forth. Many of these matters should be provided for in the local franchises, and the municipal authorities should unquestionably retain jurisdiction over them supplementary to the jurisdiction assumed and exercised by the state itself.

528. Requirement that adequate service be rendered.—Thus far in this chapter we have been discussing matters pertaining primarily to corporate management or to general safety which naturally fall within the jurisdiction of the state authorities, whether the operation of the utility in question is interurban or wholly intra-urban. When we come to the matter of adequate service, however, the line dividing state from local jurisdiction with respect to intra-urban utilities is less clear. No doubt, as a fundamental obligation assumed by the companies in return for their state charters, the giving of adequate service can appropriately be enforced by state agencies. At the same time the standard of what is adequate varies considerably with local conditions, and the determination of this standard as well as its enforcement may often wisely be left to the municipal authorities wherever by franchise provision or administrative machinery the cities have prepared themselves for the exercise of this function. In certain things, such as the candle-power or heat units of gas and the purity of water, the state should undoubtedly establish a minimum standard applicable everywhere within its limits,

but with local street railway schedules and electric and telephone service a state commission is not so well fitted to deal as a well-equipped utility department of the city government would be. Naturally, in all interurban operation of public utilities the state must assume jurisdiction of the matter of service. The assistance of the state commission will be particularly helpful in enforcing the demands of the consumers for adequate long-distance telephone connections, for extensions of street railway and other service, for sufficient pipe-line capacity for natural gas supplies, for the protection of water supplies, for adequate development of water-power, and so forth.

529. Regulation of rates.—The question of rates is much like the question of service. In a city having a clear-cut franchise policy and well-developed administrative machinery for supervising public utilities, rates can properly be left for local regulation by contract or ordinance, but where these conditions do not prevail state machinery should be available to the citizens for getting a review of service charges deemed to be unjust. Rates are fundamental. In the fluctuating conditions that beset public service companies, the necessity of adequate rates for reasonable service is fully as great as the necessity of adequate service for reasonable rates. For this reason, the companies ought to have an appeal from the decisions of the local authorities in rate-making. It is better that this appeal should be to a state commission, at least in the first instance, than to the courts, for the reason that an appeal from the local authorities directly to the courts would not give an opportunity for the development of a consistent theory of rate-making for the state at large and would not take adequate advantage of the statistical knowledge gained by the state commission through its supervision of accounts and financial reports. In cases where a utility is manufactured or developed in one center and distributed from that point to different cities, the regulation of rates, at least the primary ones, will have to be undertaken by the state authority in the first instance. Another phase of the rate question in which the state is naturally interested is the matter of discrimination. In this respect nothing should be left to the caprice or negligence of local authorities. Unjust discrimination should be forbidden by state law, and it should be left to the state commission to determine just what constitutes

unjust discrimination and to apply the test in particular cases. Even free service to municipalities may be regarded as unfair discrimination, as the Wisconsin commission has in fact held. The fixing of specific rates for long terms of years in municipal franchise contracts should not be encouraged. It is proper that initial rates should be fixed in franchise grants, but they should be subject to decrease or increase either by future agreement or by the exercise of rate-regulating power by the municipality subject to appeal to the state commission or by the state commission directly.

530. Relation of state utility commissions to local authorities.—There will inevitably be some friction between local and state authorities in the effort to supervise and regulate the operations of public utility companies, just as there is between federal and state authorities in regard to commerce. This friction can be reduced to a minimum by a careful delimitation in the statutes of the respective jurisdictions and by the cordial coöperation of state and local administrative authorities. On the other hand, political differences and differences in attitude toward vested rights, where such differences exist, will tend to increase this friction. As a general rule, to the extent that the state at large assumes and exercises the regulative function, to that extent state policies should prevail and the local authorities should have only a supplementary jurisdiction. All local franchise grants should be submitted to the state commission for examination and approval, but the discretion of the state body to withhold its approval of such grants should be limited to cases where the franchises are found to contain provisions in conflict with state law or inconsistent with the well-established policies of the state. In other words, the review of local grants by state authorities should be for the purpose of preventing conflicts of jurisdiction and inconsistency in general policies. But an efficient state commission, with its broader range of vision and its more comprehensive knowledge and responsibility can be of great assistance to the local authorities of the smaller municipalities in an advisory capacity. The state commission should be prepared on request to furnish standard forms of franchises, and in any case where a grant is submitted to it for approval, to suggest to the local authorities changes which it may deem advisable in the interest of uniformity and

science in franchise granting. Such suggestions would merely operate to compel a reconsideration of the terms of the grant by the local authorities, but would not be mandatory. In fact, the best arrangement might be to require all proposed franchise grants to be submitted to the state board in advance for suggestions, but not for final approval. In all cases involving the revocation of street locations or the ordering of extensions into new territory by the local authorities, unless specifically provided for in the local franchise contract already approved by the state commission, an appeal to that commission should be open to the companies. On this appeal, however, the commission should be limited to the determination as to whether or not the orders of the local authorities impose an unreasonable financial burden upon the companies or deprive them of the opportunity to render the public service for which they are organized and authorized to occupy the public streets. The same is true with reference to appeals from the orders of the local authorities fixing rates. In brief, the control of the state commission over the acts of the local authorities, should be similar in principle to the control exercised by the federal judiciary over the decisions of the state courts. The state commission should not have or assume jurisdiction where the questions involved are purely local and do not involve an infringment by the municipality of the established general policies of the state.

As the main purpose of this chapter has been to show the natural limitations upon the scope of municipal franchise contracts growing out of the exercise by the state at large of its legitimate functions in the control of public utilities, rather than to give an exhaustive discussion of the organization and authority of state commissions, it is unnecessary here to describe in detail the powers, functions and policies of the railroad, gas and electricity and highway commissions of Massachusetts, the two public service commissions of New York, the railroad commission of Wisconsin, the public service commission of Maryland, and the less-important commissions of more limited jurisdiction established in many other states. Neither is it necessary to discuss here the relation between the commissions and the judiciary, although that is a topic of absorbing interest wherever the practical effectiveness of state supervision is at issue.

CHAPTER XLII.

LOCAL UTILITY DEPARTMENTS, FRANCHISE BUREAUS AND SPECIAL EXPERTS.

531. A local board of public utilities established by the Initiative.—Los Angeles.
532. A city public utility commission established by the state legislature.—St. Joseph.
533. City commissions established by ordinance under a general enabling act.—St. Louis and Kansas City, Missouri.
534. A department of public utilities with a superintendent at its head.—Seattle.
535. A municipal bureau of franchises.—New York City.
536. Special authorities established for particular utilities in various cities.
537. Special employment of franchise experts and utility engineers.
538. General scope of local supervision and importance of special administrative machinery.

531. A local board of public utilities established by the Initiative - Los Angeles.—With eighteen water companies, four gas companies, three electric companies, two telephone companies and four street railway companies operating within its borders, with its population more than trebling in ten years, with the obligation resting upon its council under the constitution and laws of the state and the ordinances of the city to fix once a year the rates to be charged by companies supplying water, gas, electric light and telephone service, it is little wonder that Los Angeles felt the need in 1909 for the establishment of a municipal department of public utilities. The popular demand for such a department became so great that the city council passed an ordinance to create a commission. This measure was so weak and unsatisfactory, however, that the Municipal League drafted a new ordinance, circulated initiative petitions for it and had it submitted to the people at the election held December 7, 1909, when it was approved by a vote of 16,626 for, to 9,696 against it.[1] By this ordinance a deparment of public utilities was established to be under the management of a board consisting of three

[1] First Annual Report of the Board of Public Utilities, City of Los Angeles, June 30, 1910; Ordinance No. 19,418 (New Series),

commissioners to be appointed by the mayor, subject to confirmation by the city council. After their initial terms had been adjusted, all commissioners were to hold office for three years, one retiring each year. The commissioners were to serve without pay, but a special fund was established to meet the expenses of the department. The appropriations to this fund were to be not less than $12,000 a year. The duties of the board of public utilities were described as follows:

"1. To make each year a thorough investigation into the affairs of all persons, firms or corporations operating or maintaining water, electric lighting, power, gas or telephone systems, or street railways, or interurban railroads, or other public service utilities in the City of Los Angeles, and compile such data as may be necessary to determine the proper charges for the service furnished or supplied by such persons, firms or corporations, as provided in the charter of said city, or otherwise by law. Such data shall include a valuation of the physical properties of such persons, firms or corporations, a detailed statement of gross and net earnings, and of expenses, and of capitalization and indebtedness thereof, and such other matters as the Board may deem proper, and shall also include such facts and figures as may be obtainable regarding the operation and maintenance of similar systems and utilities in other municipalities.

"2. To recommend to the City Council, prior to the first day of March of each year, a schedule of charges for the services specified in subdivision 1 of this section.

"3. To investigate any and all complaints against the service or the charges of any person, firm or corporation operating any public service utility in the City of Los Angeles, or furnishing any public service to the city or its inhabitants, including the supplying of water, electric lighting, power, gas and telephone service to said city or its inhabitants, and the operation of street railways and interurban railroads, and to recommend legislation to the City Council, or action to executive officers of the city, whenever in the judgment of said Board such legislation or such action may be necessary.

"4. To superintend the inspection of all public utilities and services operated, maintained or furnished by persons, firms or corporations in the City of Los Angeles, as to their compliance with their franchises, and with law and the ordinances of said city regulating the manner of conducting their business, and the service and charges of such persons, firms or corporations, and their treatment of the public, and from time to time to recommend such legislation or executive action based on such investigation, as in their judgment may be required.

"5. To prepare and keep a detailed and indexed record of all public service franchises granted by the city that are now in existence, or that may hereafter be granted, showing the date, location, term thereof, and all other essential facts, and a similar record, so far as practicable, of all other public franchises exercised in the City of Los Angeles.

"6. To make a report to the Council, in the month of June of each year, of which not less than 1000 copies shall be printed for distribution at the expense of the city, giving the essential facts and figures concerning the aforesaid public utilities operated and maintained in the

City of Los Angeles, comparing their charges and character of service with those of similar utilities in other municipalities. Such report shall contain a digest of the transactions of the Board during the year for which it is made, together with such information and suggestions relative to the public services and utilities furnished or operated in the City of Los Angeles as it may deem of general interest."

It was also provided that every application for a franchise made to the city council should be referred by that body to the board of public utilities for its recommendation before the franchise was advertised for sale. The ordinance provided also that all public utility companies operating within the city limits should permit the members of the board or any person designated by the board to inspect their property and to examine their books, maps and other records showing their affairs, transactions and financial condition.

The report of this Los Angeles commission for the period of less than seven months ending June 30, 1910, shows a marvellous amount of work done, considering the shortness of the period and the meagerness of the appropriation. The board's recommendations as to rates were not always followed, however, by the city council. The most notable instance of a difference in the policy actually carried out as compared with the policy recommended was in the matter of telephone rates. Instead of raising the Independent company's rates as recommended by the utilities board, the city council cut down the rates of the Bell company. This action of the council was supported by at least some of the citizens on the theory that even if the rates fixed should bankrupt both companies, it would be good enough for them for maintaining the nuisance of a double telephone system without reciprocal privileges.[1]

532. A city public utility commission established by the state legislature—St. Joseph.—A new charter drafted by a committee of citizens and passed by the Missouri legislature in the form of an act to govern cities of the first class was adopted by the electors of St. Joseph, Missouri, September 7, 1909.[2] An important feature of this charter was the establishment of a public utilities commission consisting of five members to be appointed by the mayor for terms of two years,

[1] *See Pacific Outlook*, issue of June 4, 1910.
[2] This charter was published as a supplement by the *St. Joseph News-Press*, August 10, 1909.

two commissioners to go out of office one year and three the next. Not more than three of the commissioners could belong to the same political party, and no one was eligible to hold the office of commissioner, or to have any employment under the commission, who held any stock or bonds in any local public utility company, or had any official relation to any such company or any interest in it. The commissioners were to serve without pay, but were authorized to employ assistants. The city counselor was to act as the commission's legal representative. The powers and duties of the commission were described as follows:

"(1) To receive, file, hear and determine all written complaints made to such commission in regard to any of the matters over which such commission may have jurisdiction, and make such findings and orders in relation thereto as may be reasonable and just.

"(2) To investigate on its own motion, or when requested by the common council all complaints, irregularities and matters touching the acts of all public service corporations or companies doing business in such city, and to ascertain and determine whether such corporations are complying with the laws and the ordinances of said city, and are carrying on and conducting the business in which they are engaged in conformity to their franchises.

"(3) To determine and fix such rates and charges of corporations owning or operating telegraph lines, telephone lines or exchanges, street railways, subways, conduits, or engaged in furnishing gas, steam, electricity, light, heat or power, or in furnishing or supplying water, or refrigeration; to prescribe the character and quality of such service, and to prescribe such rules and regulations in relation thereto as may be just and reasonable.

"(4) To supervise and regulate the manufacture, sale and distribution of water, gas, electricity, light, heat and power, and to regulate the kind and character of meters to be used in connection therewith, and have control of the inspection thereof."

It was enacted that "no franchise, nor any right to or under any franchise, heretofore or hereafter granted to any corporation, shall be assigned, transferred, leased, mortgaged or encumbered, nor shall any contract or agreement with reference to or affecting any such franchise or right be valid or of any force or effect whatsoever unless such assignment, transfer, lease, contract, agreement, mortgage or pledge shall have been first authorized and approved by such commission." Moreover, no public service corporation was to acquire or hold any of the capital stock, bonds, obligations or property of another corporation operating a similar public utility without first getting the commission's consent. No public utility

stocks or bonds were to be issued except under an order of the commission, stating that in its opinion the use of the capital to be secured by the issue of such securities is reasonably required for the purposes of the corporation. The commission was given power to subpoena witnesses and compel the production of books and records. No person was to be excused from testifying or from producing records on the ground that such action might tend to incriminate him, but it was stipulated that a person's testimony before the commission should not be used against him in a criminal proceeding, except for perjury. The commission was authorized to proceed, either on its own motion or on written complaint of any person or corporation, to investigate any acts committed or omitted by a public utility company claimed to be in violation of law, ordinance, franchise or order of the commission. If a company refused to comply with the commission's findings, except pending an appeal to the courts, it would be guilty of a misdemeanor and would subject itself to a fine of not less than $50 and not more than $1000 for every day of such refusal. Interurban railroads were expressly exempted from the commission's rate-making jurisdiction. It was made the express duty of the commission "to prepare and keep on file in its office maps, plats and charts containing the description and giving the location of the properties of every public service and utility company carrying on and conducting its business in such city," and also to keep on file in its office "a schedule of all rates and charges authorized by such commission or fixed by law as well as all orders issued by such commission."

533. City commissions established by ordinance under a general enabling act—St. Louis and Kansas City, Missouri.—On May 8, 1907, the Missouri legislature passed what has become known as the "Enabling Act," by the terms of which public utility companies were forbidden to charge more for their services "than such rates as shall be fixed from time to time by ordinance, by the cities in this state in which such utilities are operated," and conversely all cities of the state were authorized to fix public utility rates on condition that such rates should be reasonable and should not be changed oftener then once in two years.[1] Any city or town in the

[1] Session Acts of Missouri, 1907, p. 119.

state was authorized to establish by ordinance a committee or commission "to make investigation into all facts and matters touching the establishing of such just and reasonable rate or rates of charge," and to report its findings and recommendations to the city council. The city council was authorized to make provision for compelling the production of books and papers and the attendance of witnesses before itself or before any committee or commission duly constituted by it, for the purpose of ascertaining what was a just and reasonable rate or rates.

Both St. Louis and Kansas City have established local commissions under this act. By ordinance approved February 24, 1909,[1] the municipal assembly of St. Louis created "The Public Service Commission" to consist of three members appointed by the mayor and confirmed by the upper house of the assembly. The commissioners were to hold office for three years, one going out each year. Before entering upon the duties of his office, each commissioner was to take oath that he was not pecuniarily interested, directly or indirectly, in any company, firm or corporation subject to the provisions of the ordinance, and no person so interested was to be employed by the commission. At the close of each investigation made by it and regularly every six months, the commission was to report to the municipal assembly. Each commissioner was to receive a salary of $2400 a year, in addition to all necessary travelling and other expenses incurred by him under authority of the commission in the discharge of official duties. An appropriation of $25,000 was made for the support of the commission. The duties of the commission were outlined as follows:

"First: To make investigations into all matters connected with all rights, privileges and franchises held or claimed by any and all persons, firms or corporations owning or operating a telephone or telegraph line, system or exchange, or a street railway line, or system, or a tunnel, subway, conduit or viaduct, or engaged in furnishing gas, steam or electricity for lighting, heating or power, or engaged in furnishing water, heat or refrigeration, under franchise granted by the City of St. Louis or by the State of Missouri, effective or operative within the limits of the City of St. Louis; to collect, revise and publish all laws, ordinances and permits dealing with such rights, privileges and franchises, and to report to the Municipal Assembly all material violations of any of the said rights, privileges or franchises, or of any Charter provision

[1] Ordinance 24,196.

or State law relating to said rights, privileges or franchises, together with the recommendations of such laws or ordinances in this regard as shall in its opinion be advisable to protect the best interests of the City of St. Louis and the public.

"Second: To make investigations into the methods of operation, the facilities offered, the quality of service rendered and such other matters connected with the operations of such persons, firms or corporations as concern the general welfare, and to recommend to the Municipal Assembly such changes and improvements in the operations and conduct of such persons, firms or corporations as will best promote the public interests, preserve the public health and safety and protect the general welfare of the City of St. Louis and the inhabitants thereof.

"Third: To make investigations into all facts and matters tending to show the just and reasonable rate or rates charged for the services of all persons, firms or corporations mentioned in this ordinance in so far as it is within the power of the City of St. Louis to regulate such charges, and to report to the Municipal Assembly its findings, together with recommendations of what, in its opinion, constitutes a reasonable rate or rates of charge for such services in the City of St. Louis.

"Fourth: To investigate and report upon any and all matters connected with the said public utilities, upon request of either House of the Municipal Assembly, or of any committee thereof, or of any officer of the City of St. Louis acting in the course of his duties."

In Kansas City a "Public Utilities Commission" was first established by the common council May 19, 1908.[1] This commission was composed of seven members appointed by the mayor. Not more than three of the seven were to belong to the same political party, and one was to be "selected from the ranks of organized labor." After two years of experience with this commission, Kansas City, having changed its political spots, concluded to establish a new commission under a new ordinance, which was approved May 3, 1910. The new commission was to consist of three members appointed by the mayor for a two-year term. Not more than two of the commissioners could be of the same political party, and no one was eligible to appointment on the commission who was interested in any way in a franchise or contract with the city, or in the purchase or sale of any property from or to the city, or in any public service company operating in the city. Any member of the commission could be removed at any time by the mayor when such removal was deemed necessary for the effective accomplishment of the objects and purposes of the commission. Members and employees of the commission were forbidden to accept any free transportation, rebate or any other gratuity whatever from any public service corpora-

[1] Ordinance No. 39,682.

tion. This commission was authorized to investigate facts relating to the fixing of reasonable rates for public utility services; to examine the franchises and the regulatory ordinances of the city to see whether or not their terms were being complied with by the public utility companies; to report such matters as it might deem of value to the common council and to the mayor; to examine and carefully tabulate and record the facts as to the location of all property of public service corporations in the city; to make a careful study of the proper location, arrangement, operation and maintenance of terminal facilities within the city; to gather information in regard to such matters in other cities; and to report from time to time to the mayor and common council the facts ascertained, together with the commission's conclusions and recommendations in regard to them, including the matter of rates and charges and the quality and manner of service.

If any public service corporation was found to be violating the terms of its franchise or the city ordinances, the commission would have authority to issue an order requiring the company to cease such violation, and in case the company refused or neglected to comply with the order, the matter was to be turned over to the city counselor to take all necessary measures to stop the violation and to punish the company, even to the extent of forfeiting its franchise if, in the city counselor's opinion, such action would be warranted in law. Each member of the commission was to receive a salary of $1000 a year, and provision was made for the appointment by the mayor of a special counselor for the commission at a salary of $3,600, but only $4000 a year was allowed for expert investigators employed by the commission. There was to be a clerk at $100 a month and not to exceed four inspectors at four dollars a day, but the city engineer's force was to help out when more inspectors were needed. In addition to its other powers, the commission was authorized "to inspect, view and make copies of all books, accounts, papers and vouchers" of any public service company with respect to the conduct of its business, for the use of the commission in matters of which it had jurisdiction.

Though the St. Louis and Kansas City commissions have little more than advisory powers, their investigations, and their reports to the municipal legislative body tend to pub-

licity, which is the greatest of all regulative forces. Each commission, among its first acts compiled and published a book of franchises in force in its own city. This is one of the first and most essential steps in the development of a policy of effective local control of public utility services in any city. In a public address on the work of the Kansas City commission, September 20, 1910, Mr. J. A. Harzfeld, president of that body, recommended that its powers should be increased so as to include authority to enforce its own orders; to regulate rates, subject to court review; to regulate the issuance of stocks and bonds in enterprises no longer experimental, and to prescribe a uniform system of accounting so as to keep operating expenses, repairs and replacements from being disguised as capital investment.[1]

534. A department of public utilities with a superintendent at its head—Seattle.—By a charter amendment adopted in March, 1908, the city of Seattle created the office of superintendent of public utilities.[2] This official was to be appointed by the mayor and be one of the five members of the board of public works, which would have authority to adopt rules and regulations governing his department. The duties of the superintendent of public utilities were described as follows:

"He shall rigidly enforce the provisions of all franchise ordinances, and the rules and regulations of the board of public works, relating to his department. He shall, so far as public necessity may demand, superintend all franchise construction which may be carried on in or across the streets of the City of Seattle. He shall from time to time present to the board of public works written recommendations as to such changes or betterments which should be required to be made in the equipment of franchise companies in order to secure the comfort and safety of the public. He shall keep an accurately indexed record of all franchise work showing the time of beginning and completion. He shall keep on file in his office a series of plats drawn to scale, showing the exact position that each public utility occupies in the streets, together with sectional maps, showing the depths at or to which the same may lie below the surface of the streets. It shall be his duty to carefully examine every application made for franchise construction in the City of Seattle and report his recommendation on each to the board of public works. In connection with the city council he shall consider every application made to the City of Seattle for a franchise and present his recommendations thereon in writing. He shall, under civil service rules, have control of the employment of all labor, skilled or other, in his department. He shall have such other additional powers as the city council may by ordinance grant, and he

[1] *See Kansas City Municipal Facts*, issue of October 3, 1910.
[2] Charter and Ordinances, *already cited*, p. 44.

shall perform such other duties as the city council or board of public works may, from time to time, prescribe or direct."

The report of the Seattle superintendent of public utilities for the year ending November 30, 1909, throws an interesting light upon the activity of the department along the lines laid down by the city charter. In summarizing the reports of the department to the city council on franchise applications, Superintendent Valentine stated that his office "has considered franchises as contracts, the object of the City being to secure proper public service of which the standard is specified, and to allow, under proper safeguards, the grantees such privileges as will enable them to derive a reasonable revenue upon their investment, and thus induce large interests to seek investment for their capital in legitimate enterprises in Seattle." Referring to the work of enforcing franchise obligations, Mr. Valentine said that the department's need of legal assistance from the corporation counsel's office would utimately result in requiring the assignment of one of the corporation counsel's staff to take care of the legal work incidental to the supervision of the public service companies.

"The field of public service utility control," said he, "is extending so rapidly, and the necessity for legal advice in devising restrictions to prevent public service companies from encroaching upon public rights, is becoming so urgent, that it will ultimately require the services of one man, capable of specializing on the law of franchise interpretation and public utility control, in order that this department may be in a position to obtain the best legal advice in the determination of questions involving the granting of public service privileges, the maintenance of proper standards of service, and the enforcement of franchise obligations."

One of the most important features of the department's work is the preservation and completion of records showing the physical occupation of the streets by the various public utilities. Mr. Valentine stated that at the time of its organization, the department of public utilities took over from the city engineer a system of records showing the location of underground structures and that this system had been kept up to date by the department and enlarged upon.

"In recent years," said he, "a study of these records and the experience gained in the direction of construction work of the public service companies, has shown the evils resulting from the lack of a guiding plan in such work and the necessity of systematic arrangement in order to obtain the maximum use of the space in the streets. Other cities

were looked to in the hope of finding a pathfinder in such work, but, as far as it was possible to discover, none of the larger cities of the United States has adopted a systematic scheme for underground work, with the result, in many cases, of great confusion and much unnecessary expense to the utility concerns in the way of increased cost of work done, and to the public because of the excessive tearing up of pavement, and the greater cost of constructing municipal pipes and conduits.

"During the year this department has developed a set of standard plans and regulations governing underground construction, which, as far as available space will permit, will provide a place for everything, and result in the locating of each pipe or conduit in its proper place."

535. A municipal bureau of franchises—New York City.—Viewed from almost any standpoint it is an astonishing fact that New York had grown to be a metropolis of 3,500,000 population before it established a bureau of franchises. Most American cities are still getting along without such a bureau. The circumstances leading to the establishment of the New York bureau of franchises well illustrate the careless and haphazard manner in which all great cities have in most instances dealt with the public utilities within their borders.

"The people, as a body, understand little of the intricacies of the franchise question," said Mr. Harry P. Nichols, in an address giving the history of the New York bureau, of which he has been the head since its establishment,[1] "and the higher officials of the city elected every two or four years cannot have an intimate knowledge of the subject, unless there is some bureau connected with the city government which can at short notice present them with all the facts connected with any application which may be made.

"I think this point can best be illustrated by an application of a street railway company made shortly after the charter of Greater New York took effect. It was a company organized to construct and operate a street railroad one block in length, its capital stock being held by the existing monopoly, and when its application was presented to the Board the attorneys for the company represented that its one object was to give better transit facilities, and make a connection between two lines, whereby a through line could be operated, thus avoiding transfers. The company offered to comply with the provisions of the charter regarding compensation in any manner which might seem to the members of the Board to be right, and offered a sum of $500, and later $1000, a year for the right to lay tracks on this one block, and it had practically received the assurance of at least some of the officials that its application would be considered favorably. The matter, coming before the Board in the regular way, was referred to the Comptroller for investigation, and the report which was presented to him at the time showed that the granting of this franchise, enabling two or more companies to operate a continuous line, would be the means of de-

[1] "Progress in Methods of Granting Franchises in New York City," an address delivered at the City Club of Philadelphia, May 4, 1907.

priving the city of about $3000 per annum of its present income from one of the existing lines. It came about in this way: One of the lines was known as a car license fee line, being obligated to pay $50 per car per annum for each car run. The second was a percentage-paying line, paying three per cent. of its gross annual receipts. It was proposed to run the car license cars over the percentage-paying line, and it was calculated that no additional cars would be required, but that these same cars run over the tracks of the percentage-paying line would deduct from that line about forty per cent, of its gross receipts, upon which it paid a percentage to the city. This report placed the facts fairly before the Comptroller, and from that time on careful scrutiny was given to the applications for franchise rights. It was not, however, until the controversy with the gas companies over their respective franchises, and the price charged the city for gas and electricity, that the city commenced systematically to collect all data pertaining to public service corporations, and placed the same in one bureau where it could readily be obtained."

The New York franchise bureau was formally established February 1, 1905. It immediately set out to search for all obtainable information pertaining to the public utility corporations in their relations with the state and with the city. The work undertaken included the searching of the minutes and records of the various legislative and administrative boards and officials of the forty political subdivisions formerly exercising authority within the present limits of the Greater City. The bureau also collected and examined the certificates of incorporation, the state charters, the local franchises, the leases and the certificates of merger or consolidation of the various public utility companies and undertook the investigation of their capitalization and the market price of their securities. All laws, ordinances, legal opinions and court decisions affecting the companies' rights, were collected. On the basis of this and other information this bureau undertakes to report to the board of estimate and apportionment on all franchise applications. Indeed, the negotiations with the applicants and the drafting of the franchise contracts are usually handled by this bureau. The bureau also supplies information to the law department of the city and to the various administrative officers by whom permits are issued to the various utility companies for opening the streets. The bureau also keeps track of the operation of the companies to see that they live up to their franchise obligations.

More recently, a second bureau of franchises has been established in New York City, under the auspices of the public

service commission of the first district, the approval of this commission being required before any new franchise can be exercised by a street railway, gas or electric company within the city limits. Accordingly, all franchise propositions in New York City at the present time are submitted to the independent scrutiny of two expert bureaus.

The New York charter commission, of which Mr. William M. Ivins was chairman, reported to the state legislature under date of March 8, 1909, a proposed draft for a new charter, and on April 20, 1909, submitted a draft of an "Administrative Code," so-called. The plan advocated by this commission involved the elimination of a great mass of detail from the cumbersome city charter now in force and the inclusion of all such matters as might properly be left to the discretion of the city in a supplementary code which would be subject to future amendment without state legislative action. The proposed charter made provision for a bureau of franchises under the board of estimate and apportionment. The administrative code prescribed that all persons or corporations exercising franchises within the city should report to this bureau, at such times and in such manner as it might prescribe, facts pertaining to the operation of such franchises. The chief of the bureau was to have authority to summon persons or the officials of the public service corporations and examine them under oath on matters relating to such franchises. The proposed code expressly provided that the bureau of franchises should perform the following functions:

"1. Compile and keep a record of all franchises and consents to the exercise of franchises and of all rights and privileges, and facts pertaining to the operation thereof, heretofore or hereafter granted by the City of New York or by any public or municipal corporation united and consolidated to form the City of New York, or by any board or body thereof;

"2. Examine and report upon all applications for franchises or for consents to exercise franchises, or for rights or privileges, made to the board of estimate and apportionment;

"3. Report to the board of estimate and apportionment recommendations respecting the terms and conditions to be attached to any franchise or consent to the exercise of a franchise, or right or privilege, and the amount of compensation to be paid the city therefor;

"4. Examine all permits issued by any department to place upon public property any structure pursuant to any franchise, right or privilege, and to compare the terms of such permits with the terms of such franchise, right or privilege as granted by the City or any of the public or municipal corporations heretofore united and consolidated to form

The City of New York, or any board or body thereof. Except with the unanimous consent of the board no such permit shall become operative and of effect without the certificate of the chief of the bureau of franchises, or his duly authorized representative that its terms are in conformance with the terms of the franchise, right or privilege in pursuance of which it is issued."

The recommendations of the charter commission have not as yet been enacted into law, but it seems comparatively certain that the New York City bureau of franchises will increase rather than diminish in importance as time goes on and franchise questions come into greater prominence.

536. Special authorities established for particular utilities in various cities.—We have already described in a preceding chapter the functions of the board of supervising engineers established by the Chicago street railway franchises and of the city street railroad commissioner provided for in the recently enacted street railway ordinance of Cleveland.[1] During the long-continued struggle in Chicago between the city and the street railway companies, the city council established a standing committee on local transportation which to a considerable degree became an expert body. This committee is still maintained, and handles all franchise matters coming before the city council that relate to surface street railways, elevated roads and subways. While the common council of almost every city has a standing committee on franchises or public utilities, it is seldom that such a committee attains the dignity and power of the committee on local transportation of the Chicago council. Another committee of the Chicago council which has attained an important position in the development of the city's franchise policy, is the committee on gas, oil and electricity to which important franchise matters not relating to transportation are referred. New York and Boston have each established a special board to handle rapid transit matters. The laying out of routes and the drafting of franchises for elevated railroads were put into the hands of special commissions both in New York City and in Brooklyn under an act of the legislature passed in 1875. These early commissions, however, had no connection with each other. When there was demand for a new rapid transit line, a new commission would be appointed by the mayor to lay out a route and organize a company to build it. As soon as the com-

[1] *Ante*, Chapter XXV, sections 335 and 339.

pany's organization was completed, the commission would go out of existence. But in 1891 a permanent rapid transit commission was established whose sole function was to lay out routes for rapid transit lines either underground or elevated, and to grant franchises covering such routes, subject to the approval of the common council. Later, when municipal construction of subways was determined upon by vote of the people, it became the duty of the rapid transit commission, instead of granting franchises, to enter into contracts for the construction and operation of the municipal subway lines. With the establishment of the public service commissions in 1907, the old rapid transit commission was abolished and its powers and duties conferred upon the public service commission for the first district, a state body. The Boston transit commission was established originally as a temporary body for the purpose of constructing a subway. It has been continued from time to time under special acts of the Massachusetts legislature for the purpose of building additional subways and leasing them to the Boston Elevated Railway Company for operation. Both New York and Boston have thus recognized the importance of establishing a special commission with adequate facilities for making the investigations necessary prior to the adoption of a comprehensive constructive policy with relation to that most important of all metropolitan utilities—rapid transit.

Provision for the appointment of special officers to inspect gas and electric meters and service are not altogether uncommon. A gas inspector is charged with the performance of a technical service in the examination and testing of meters, the testing of gas for impurities and for calorific and candle power, and the testing of pressure in the mains. To the gas inspector the patron of the gas company can make his complaints. If the complaints relate to matters under the inspector's jurisdiction, the consumer can have them attended to in an orderly way. In some cases the city electrician holds a similar relation to the electrical service rendered within the city of which he is an official. On the whole, however, the number of special authorities established by the various cities of the country to acquire expert knowledge in the supervision of the public utility companies is small. In this whole field "the harvest is great, but the laborers are few."

537. Special employment of franchise experts and utility engineers.—Cities are coming more and more to recognize their need for expert assistance in dealing with the highly trained officials and counsel of public service corporations. The men throughout the country in control of particular classes of utilities form an expert and rather highly organized body. Whenever a city enters into a franchise negotiation with a public service corporation, the chances are that the corporation has prepared itself for the emergency by a long-continued and careful investigation of the facts relating to the question at issue, and in doing so has had the expert services of a permanent, highly trained force of counsel, engineers and accountants. On the other hand, a city is seldom ready when it begins a franchise negotiation. The inevitable result of the unequal contest is the total or partial defeat of the city in the negotiations. It is owing to the recognition of these facts that a number of cities in recent years have brought themselves to the employment of special experts, chiefly engineers and accountants, to assist the regular city authorities in negotiating franchise settlements, in the appraisal of public utility properties or in the investigation of operating costs preliminary to the regulation of rates. The cities have been and still are at a considerable disadvantage in the employment of experts for the reason that most of the gigh-grade engineers, accountants and lawyers depend chiefly upon private employment for their professional emoluments. Cities generally feel unable to afford the high prices for professional services which public utility corporations pay without wincing. Expert gas, electrical, telephone and transportation engineers and high-grade accountants, like the leading lights in the legal profession, come to feel, therefore, a certain chronic sympathy with the point of view of the corporations to which they look for their usual and most profitable employment. It often pays an expert better, when in the employ of the city, to bend his efforts toward soothing the municipal rage against corporations and bringing public officials to see how, after all, it is necessary for them to adopt a "fair" or even a liberal attitude toward capital. The result is that appraisals undertaken by expert engineers are in most cases notoriously high, and costs of manufacturing gas and electricity worked out by expert accountants may even

be in excess of the prices voluntarily charged by the companies. In view of the cities' sore need for special expert services on particular occasions, it is unfortunate that corporate interests so generally dominate the expert field. It is inevitable, however, that with the increasing demand on the part of cities for impartial expert service and with their development of a willingness to pay for such services what they are worth, the available supply of independent experts will increase. Certainly no city which has not built up an expert department for handling public utility matters can afford to pass through a serious franchise crisis without calling in the services of the best experts that are available.

538. General scope of local supervision and importance of special administrative machinery.—At least every city with 100,000 population ought to have as a part of its permanent administrative organization a commission, a department or a bureau whose function would be to exercise constant supervision over the various public utilities operating within the city limits. The specific nature of the work to be done by such a commission, department or bureau, is suggested, at least in part, by the practical experiments already made in this direction as described in preceding sections of this chapter. This work includes the preparation and preservation of a complete, accurate and convenient record of all franchise grants under which local utilities are operated, together with all laws, ordinances and court decisions interpreting or modifying such franchise rights. An equally important division of this work is the preparation and preservation of an accurate physical record of the franchise structures in the public streets and places, and the development of a scientific plan for their coördination to the end that the available space in, over or under the streets may be used to its maximum capacity with the minimum of obstruction, mutual interference and expense in opening the streets. As a supplementary part of the work, the local utilities commission, department or bureau should be charged with the supervision of all construction work under franchise grants, to the end that the cost of construction may be accurately determined, the character of the materials used be kept up to the highest standard, and the requisite provisions for safety, speed and thoroughness in carrying on the work be made. All appli-

cations for new franchises should be investigated by this commission, department or bureau, and careful reports and recommendations relating to such applications should be made to the common council or other franchise granting body. It should be a part of the functions of this commission, department or bureau to enforce the franchise and ordinance obligations of the public utility companies, to investigate their accounts, to prescribe the forms of reports to be rendered to the city, to hear complaints of citizens regarding the character or extent of the service rendered, to fix or to recommend to the council the fixing of reasonable rates and standards of service, and generally to exercise those functions in relation to the control of public utilities which any well-ordered municipality of large population must exercise. As already suggested in a preceding chapter, in commonwealths where state commissions are established with intimate supervisory jurisdiction over public utilities, the functions of a local utilities commission, department or bureau will naturally be confined within narrower limits than will be the case where no state commissions are established, or where such commissions exercise only very limited jurisdiction. Special emphasis should be laid, however, upon the statement that no matter what kind of a state commission may be established, there is an imperative necessity for a local commission, department or bureau as a permanent factor in the administrative machinery of the city to furnish the knowledge and expert service needed in the practical handling of franchise and utility questions from the municipal standpoint.

CHAPTER XLIII.

THE RELATION OF PUBLIC UTILITIES TO LAND VALUES.

539. Land benefits and damages of public utilities other than transportation.
540. Effect of street railways upon realty values.
541. Influence of rapid transit upon land values in great cities.
542. The assessment plan for the construction of public utilities.

539. Land benefits and damages of public utilities other than transportation.—That the construction or extension of public utility plants and the installation or improvement of public utility services has an effect upon the value of land within the "sphere of influence" of the utilities is generally recognized. No real estate man trying to sell a house or a lot forgets to tell all about the sewers, the water works, the gas pipes, the electric light lines, the telephone connections and the transit lines that are available for use by the prospective purchaser. If any of these services are missing, the purchaser of real estate will find it out only after inquiry. The direct benefit of public utilities to land in their vicinity is so clearly recognized that cities usually in the case of local sewers and sometimes in the case of water mains levy the cost of construction upon the lots served. Sometimes, indeed, the cost of a main sewer is levied by special assessment upon a wide district, in addition to the cost of the local sewers being levied upon real estate, street by street. Sometimes companies operating gas plants, electric light works or telephone systems are required to extend their services to would-be consumers more or less remote from existing lines on condition that such consumers will pay the cost of the extensions of plant necessary for the purpose. All other utilities differ from transportation in one important respect. Transportation lines, except in the case of spur tracks, do not actually enter upon the private premises of the individual user, and consequently there is no special expense and no interference with his household or business plant involved in

making connections with the utility. The citizen does not have to invest capital to enable him to get on a street car. While under present methods of management, the same thing is generally true in relation to telephone service, the installation of the necessary wiring and fixtures for telephone connections at the sole expense of the telephone company is illogical. Moreover, even under these conditions the telephone differs from the street railway in that the physical connection with the telephone system involves a very considerable interference with household and office arrangements. For connection with sewers, water works, electric plants and gas mains, the individual consumer has to make a considerable capital investment, not only for the purpose of bringing the services in from the street line to his house or business place, but for the wiring, piping and miscellaneous plumbing required to prepare his building to utilize them when they have been brought in. This portion of the investment is the part of the public utility plant that is paid for and owned by the owners of real estate. If the investment is wise, the cost will be added to the value of the premises the same as the cost of any other improvement. The effect of bringing the fixtures of one of these utilities into the street or into the neighborhood where a particular piece of real estate is located is different from the effect of making a house connection or other improvement which the owner may make at any time he sees fit to do so. If there is no sewer or gas main in the street or in the neighborhood, the cost of getting sewer service or a gas supply is so enormous in relation to the value of any particular lot as to be in most cases wholly prohibitive. The value of the lot is its value without the utility, and without the possibility of getting it. On the other hand, if the utility fixtures are already in the street, the value of the lot with its connections made is only equivalent to its value without the connections plus the ordinary cost of making them. A public utility may in certain cases detract from the value of land. This is the tendency of unsightly poles, dangerous wires and mutilation of shade trees.

The question whether the original installation of a new utility in an urban center increases the aggregate value of the land in the community as a whole cannot be answered in the affirmative without qualification. A utility that is a mere

luxury will probably have little or no effect upon the total land value of a city. It seems probable that only such utilities as increase the community's general capacity for production or decrease the necessary cost of living will tend to swell the site value of the urban center. This is so because the total site value of a city is the measure of the economic advantages of city life, or, in other words, the measure of what the people of the city in the aggregate can afford to pay for the privilege of living and doing business there. Probably, all of the well-established utilities do as a matter of fact under favorable conditions either diminish the necessary cost of living or increase the city's aggregate capacity for production. Whether or not they do so in any particular community depends primarily on the rates which the people have to pay for them. The necessary cost of a sewer system or a general water supply may be so great as to overbalance its economic advantages, and even where the necessary cost of a utility is reasonable the company having a monopoly of the service may absorb all of the economic advantages arising from it in the form of unnecessary profits. It may be said, therefore, that the effect of any particular utility upon the land values of a community is primarily a question of rates per unit of service, taking both quantity and quality into consideration. If the economic advantages accruing from any utility are all absorbed by the operating company, then what the land fails to gain in value is diverted, so to speak, into a side pocket and constitutes the value of the company's special franchise. By taxing the franchise as real estate, the city government will get the same income that it would otherwise have gotten from taxing the increased value of the land if rates for the utility had been lower. The landowners of the city could well afford, however, to pay by special assessment or special tax the entire cost of the utility plant in order to distribute among themselves the increment of value represented by the franchise. Low utility rates make high rents.

540. Effect of street railways upon realty values.—What has been said in the preceding section about the effect of public utilities generally upon the aggregate land values of a city applies to street railways as well as to gas plants or water works. As pointed out, however, the street railway differs from most other utilities in that it does not invade individual

premises and does not require any capital investment on the part of the owners of lots and buildings. The street railway, moreover, is in a class by itself as a noisy and dangerous neighbor. The natural tendency of the street railway when extended into new districts is to cause a quick and substantial appreciation in the value of land throughout the territory served by it. But the effect of a new car line upon residence land immediately adjacent to it, if other reasonably convenient transit facilities have previously been available, is likely to be detrimental. The owners will suffer damages instead of benefits. It is generally assumed that any street railway service, no matter how poor or how expensive, is better than none at all. Nevertheless the value of a street railway like that of any other utility depends upon the cost per unit of service, quality and quantity both considered. In this connection, one of the prime elements of quality is speed. Time is of the essence of cost. If we imagine two cities of equal population, one occupying double the area of the other and having facilities that will enable its citizens to "circulate about" through its whole area at the same cost of time and money required in the city with a smaller area, it is probable that, other things being equal, the aggregate value of the land in one of the cities would be about the same as in the other, a stationary population being assumed. If, however, a city is increasing in population and consequently in site value, the distribution of the increase in site value can be affected by the development of street railway facilities. The landowners in an undeveloped section can well afford to pay the construction cost of street railway extensions for the purpose of securing transit facilities and keeping down transit rates; for the benefits will be reflected in higher rentals and consequent higher selling values of their land. The almost certain benefits to much land and the probable damages to some as the result of street railway extensions are both more conspicuous than in the case of other utilities. The policy of assessing benefits and awarding damages is, therefore, peculiarly appropriate in connection with street railway construction.

541. Influence of rapid transit upon land values in great cities.—It has been estimated that the increase in value in the lands of upper Manhattan and The Bronx resulting from

the construction of New York City's first subway was much more than sufficient to pay the entire cost of the improvement. Owing to the shifting standards of assessment and the rapidly increasing population of the city, this estimate could be made only in a very rough way. It is probable that the subway tended to localize an increase in land values which the rapid growth in population made inevitable. The justice of the principles set forth in the preceding section has long been recognized in a one-sided way in the judicial decisions of New York state. It is recognized that a street railway adds a burden to the street in excess of the ordinary highway easement. Consequently, in New York an abutting owner who holds the fee to the middle of the street is entitled to damages on account of the construction and operation of an ordinary street railway in front of his premises. Even where the city owns the streets in fee, as is the case in old New York, abutting owners are entitled to actual damages resulting from the construction of subways or elevated roads in front of their property. The elevated lines in Manhattan and the Bronx have paid over $21,000,000 on this account, including the expenses of litigation. It is only since 1909, however, that there has been any recognition in the law of the complementary principle that lands especially benefited by rapid transit development should be required to contribute to the cost of construction, and even now this principle is not recognized as applicable to transit development undertaken on private initiative. Rapid transit as a municipal development is undertaken principally for the relief of congestion of population, but it is generally too slow in coming and too slow after it gets here to have the effect intended. It rather has the effect of staving off the day when a great city will reach the limit of its growth. Consequently, more than any other utility it preserves the upward movement in land values. It unquestionably increases a city's aggregate productive capacity by shortening the time necessarily taken in travel and decreases the cost of living by checking the increase in density of population with all its consequent expenses. By making the business center of a city accessible to a greater number of people, it tends especially to an increase of the land values there. A new line built in an undeveloped section also greatly increases land values in its immediate vicinity.

542. The assessment plan for the construction of public utilities.—Special assessments often bring hardship to home-owners who desire to keep on living where they have settled down, but who can ill afford to occupy the space they have been using, after the value of the land has greatly increased. They could, perhaps, live in their old homes without hardship if they only had to pay taxes on an increased valuation, but when they are required to contribute the increment itself in the form of special assessments for the improvements that have caused the increase, the burden is sometimes too much for them. If a man has invested $2,000 in a lot and has built a house on it, an increase in the value of the lot to $4,000 may be of little benefit to him unless he wishes to sell. If special assessments are levied for the $2,000 increment in value, the man is, as it were, forced to invest $2,000 more in his home. He may not have the money. He may have to mortgage his property to get it. Theoretically he should sell out and move on to cheaper land, but at the rate land values are climbing up in some cities he would be kept "on the jump" a good share of the time if he did that. While in theory there would be no injustice in assessing against a man's lot the full amount of the benefit conferred upon it by each particular improvement, practical considerations tend strongly to limit the application of this theory. The single tax idea of taking the annual value of the land—the ground rent—in lieu of all other contributions to government, and out of this annual fund paying for improvements as we go along without having recourse to bond issues except in a limited way for the purpose of equalizing big burdens, would obviate the practical injustice of the special assessment plan and would be equally sound theoretically.

The assessment plan may be applied in a comparatively small way in the extension and development of utilities, but for the construction or purchase of a general utility plant, a land tax spread over the whole city is more appropriate. The assessment plan is especially difficult of application to main line rapid transit railroads because the benefits from such enterprises are so widely and imperceptibly diffused. The business center is likely to profit most of all from improved transit facilities. If specific pieces of property are made to pay for their house connections with the various

utilities in the streets and, perhaps, even pay for the fixtures that constitute the detail of the distributing systems, it is doubtful whether the assessment plan can be advantageously applied much further to the construction of public utilities. If it is impracticable to pay for them by a general land tax, substantially the same result can be obtained by the amortization of the capital invested out of earnings. The burden of amortization will mean higher rates than would be necessary without it, and higher rates will mean correspondingly lower ground rents and land values. So in the end the payment for the utilities will come out of the land anyway, but once the investment has been paid off whether by assessment, by special tax or by amortization out of earnings, the utility will he relieved of the burden of fixed charges, rates will come down and the land will get the benefit.

CHAPTER XLIV.

COMPENSATION FOR FRANCHISES AND TAXATION OF PUBLIC UTILITY PROPERTIES.

543. Compensation based on a false theory or an unfortunate condition.
544. Taxation of physical property outside of the streets.
545. Various forms of specific franchise taxes.
546. Taxation of intangible rights and street fixtures as real estate.
547. Methods of assessing franchise values.
548. Uses and abuses of franchise taxation.

543. Compensation based on a false theory or an unfortunate condition.—The public streets are supposed to be open to the free use of all the citizens on equal terms. There can be no satisfactory reason for granting a special privilege in the public streets to certain individuals primarily for the purpose of enabling them to make money out of it. If the granting of franchises is to be defended at all, it must be defended on the assumption that they are granted as a convenient means of securing the performance of a necessary public function. In every case the obligations imposed should fully offset the value of the special privileges granted. Otherwise the city government finds itself playing favorites among the people from whom it springs and upon whose will it rests. It is not denied that a company undertaking to furnish a public utility under a franchise should have the right to get a reasonable profit on its investment, but there is no reason why anybody should be permitted to get rich by means of public franchises. People do not get rich on six per cent. The terms of a franchise need be only as liberal as is necessary to induce people to put their money into the enterprise, considering the rate of profit allowed, the constancy of the income and the safety of the capital invested. The granting of a franchise on more liberal terms is monstrous, as it is simply the granting to certain individuals of the right to levy tribute upon the rest of the people. If the city absorbs this tribute in its entirety through the compensation requirements

of the franchise, the transaction changes its character somewhat, and the company assumes the role of tax-gatherer for the city. The question of compensation for franchises then becomes merely a question of the justness and expediency of levying a special tax on the consumers of a particular utility for the relief of the other taxpayers. While there may be ground for argument in regard to this question, it seems to be pretty well agreed among the careful students of public utility problems that such a tax is both inexpedient and unjust. The single taxer believes in raising all governmental revenues by a tax on land values alone; but a franchise to use a street is a land value, and logically it would be no violation of the single tax theory to treat the public highways like other land and charge for their exclusive or special use the market price, or "all the traffic will bear." The single taxers, however, would in almost every case join with men belonging to other schools of economic and political thought in asserting the expediency of maintaining the streets as a common, undivided asset of the city open to the free use of all the people. This free use evidently cannot be maintained if special franchises are granted on such terms as to enable the franchise holders to make unusual profits from their occupancy of the streets. Where the principle of compensation is voluntarily adopted by a city in the granting of a franchise, unless the compensation is strictly limited to the amount of the additional expense incurred by the government on account of the exercise of the special franchise, it is based upon the theory that this species of consumption tax is justified as a means of lightening the tax burden on property. This theory appears to be false. It seems to be both just and expedient that public utilities should be furnished at as low rates as possible, to the end that their use may be as widely distributed among the people as possible.

There are unfortunate conditions, however, which sometimes justify the application of the theory of taxation to franchises. If the franchises have been granted in perpetuity or for long periods and carry with them the right to collect tribute, the state or the city is perfectly justified in using the police power and the taxing power to correct the mistake made when the franchises were granted and to divert the tribute from the private pockets of the franchise holders into

the public treasury. It is on this ground that the special franchise tax in New York can be justified. It has undoubtedly helped to bankrupt the stock-jobbing companies that have for many years been exploiting the streets of New York City, but it would be a grave mistake to repeal or suspend the law except on condition that the companies affected by such action should surrender their perpetual franchises and submit themselves to the legitimate public control naturally attaching to the agents of government.

In strictness, we should differentiate between compensation and taxation. They are supplementary. One is not in the ordinary sense a substitute for the other. Compensation is supposed to represent payment by the company either in a lump sum or by annual instalments for the capital value, so to speak, of the franchise. Even if such payments are adequate, that fact does not constitute a reason why the capital value of the franchise should not be taxed, if under all the conditions the franchise has any such value. If a man buys a piece of land from the city, he does not think of setting up the claim that he should be exempted from taxation on account of this land just because he has paid for it. If, however, instead of paying for the land outright, he pays an annual rental equal to the full annual value of the land, compensation and taxation are merged, and no further taxes can be levied on the property. The city is under no obligation to give people either land or franchises in order to get the right to tax them. Of course, if franchises of great value have been given away, that is an added reason for taxing them. Taxation is a weapon that can be used after the franchises have gone out of the control of the public authorities; compensation is something that must be determined when the grants are made. Sound public policy would require that there be no compensation for franchises, for the reason that the special privilege involved in a franchise grant should be so loaded down with obligations as to have no special value. If, however, special privileges having special value have been granted, then by all means they should be taxed. In saying that a franchise grant should be so loaded down with obligations as to have no special value either to be paid for or to be taxed, I do not mean that a franchise should be so tied up as to be useless. I mean that rates and service should be

adjusted so as to leave no capital value in the franchise grant itself.

544. Taxation of physical property outside of the streets.—Strictly speaking, the plant and property of a utility, even the land and buildings outside of the streets, should not be subject to taxation if we recognize in its fulness the public character of the use to which they are devoted. It is customary, however, to assess gas works, car barns, power houses, telephone buildings, etc., in the same way as other land and buildings, owned by private individuals. If public utilities are not to be exempted entirely from taxation, a natural line of cleavage can be found in the distinction between the portion of the property lying within the streets and the portion lying outside of them. The property outside of the streets is generally found in separate, individual parcels and is more amenable to correct valuation by the local assessors than are the continuous fixtures in the streets, often out of sight and safely protected by the pavements from examination, and always dependent for value upon the intangible rights under which such fixtures are operated. It is, of course, understood that exemption from taxation should not be for the benefit of the franchise holder, but rather in the interest of the consumer by rendering lower rates and better service possible.

545. Various forms of specific franchise taxes.—Between the payment for a franchise in a lump sum at the time the grant is made and the payment of taxes from year to year on the value of the franchise as a part of the company's property, there are widely varying forms of compensation and tax-paying. Sometimes, indeed, in spite of the clear theoretical distinction between the two classes of payments, it is practically difficult to tell them apart. The most common forms of taxation by which the company's street fixtures and franchise rights are reached are the car license tax and the gross receipts tax. Car license fees are often as high as $50 a year for each car in use. At that rate they are likely to aggregate about one per cent of the gross revenues from passenger traffic, if all the cars pay the fee. A license tax of not more than $5 per car, when coupled with the requirement that in every car must be posted conspicuously its number and the date of its license, may be justifiable if the license carries with it a certificate that the car has been officially inspected

and found to be in safe operating condition and equipped and maintained in every respect in accordance with the requirements of the franchise, the law or the ordinance governing the case. As a means of collecting revenue in the form of either compensation or taxation, the car license fee is not justified. It puts too high a premium on scant equipment.

The gross receipts tax has met with considerable favor among students of public utility problems, for the reason that it cannot easily be evaded. It sometimes takes the form of a fixed percentage annually. Sometimes it is a graduated percentage, either arbitrarily fixed according to the age of the franchise or adjusted to the amount of the company's revenues. Sometimes it takes the form of a payment to the city of all that portion of the company's revenues derived from the excess of the rates charged over a certain schedule diminishing with the passage of time. In this latter form the gross receipts tax operates so far as the company is concerned almost as an automatic reduction in rates. If the company is authorized, under the franchise, to lower its rates to avoid the tax, the result is likely to be lower rates with an increased use of the utility, the benefit of which will go to the company and to the consumers. The gross receipts tax in any form is arbitrary. It requires the company to pay a certain portion of its revenues into the public treasury without reference to the earning power of the investment. It has no relation either to the value of the franchise or to the value of the physical property of the company or to its cost. At best it is only a rude method by which the city can get *something,* without regard to the effect of its getting upon the prosperity of the company or the quality of the service.

The dividend tax or the division of net profits is usually based on the theory that a public utility should pay operating expenses and a reasonable minimum return upon capital actually invested before being required to pay anything into the public treasury on account of the franchise. This theory is certainly logical as far as it goes. It has been discredited until recently for the reason that the companies were able and generally willing to conceal their net profits by fictitious capitalization and delusive book-keeping. With the assumption by the state of strict control over stock and bond issues and the accounts of public utility companies, the division of net

profits with the city is coming into favor as a method of compensation. This method is not open to serious objection, if the city gets a large enough share of the profits and puts that share into a sinking fund to provide for the purchase of the plant. The success of this method depends, of course, upon strict public control of the company's expenditures and especially upon adequate provision for the constant upkeep of the property to the highest practicable standard of operating efficiency. The fact that the city shares in the net profits in any particular case and may be able to establish a sinking fund out of its share should not be considered a legitimate excuse for the failure to provide for amortization of capital out of earnings before the division of net profits. What the city may be able to contribute to the amortization fund out of its share of profits will only hasten the day when the capital can be retired. All franchise taxes and compensation except in so far as they are designed as a substitute for street maintenance which the city prefers to take care of directly, should be secondary to operating expenses, interest on investment and amortization charges.

546. Taxation of intangible rights and street fixtures as real estate.—The "easement tax" of Maryland and the "special franchise tax" of New York represent the two important methods of taxing franchises as property. The easement tax applies to the separate value of the intangible rights in the streets, while the special franchise tax lumps together the franchise proper and all the tangible property within street limits. So, when it is said that the franchises of the public service corporations of New York City are required to pay taxes on a valuation of 470 million dollars, it is meant that the street car tracks and wires, the elevated railroad structures, the electrical conduits, the telephone and telegraph wires, the gas pipes and all the other utility fixtures in the streets, coupled with the companies' rights to maintain them there, have been valued at the amount named. As a matter of fact a complete valuation of the public utility fixtures in the streets of Greater New York, whether based on original cost or on cost of reproduction less depreciation, would probably equal more than half the entire assessment for special franchises including these fixtures. The New York plan of assessing franchises as real estate is based on a sound prin-

ciple, but it fails to differentiate between land value represented in the intangible right itself and improvement value represented in the fixtures. While ordinary real estate in New York City is assessel as "unimproved" and also as "improved," the special franchises are assessed as "improved" only. The effect of this method of assessment and taxation upon public utility service is likely to be even more disastrous than taxes on ordinary improvements, for the reason that the value of the improvements in the case of public utilities is likely to constitute a much greater proportion of the total than is true in the case of ordinary real estate.

547. Methods of assessing franchise values.—It is no easy task to assess accurately the value of intangible property. One might suppose that the franchise values held by a public service corporation could be readily ascertained by taking the aggregate market value of the company's stocks and bonds and subtracting from that amount the appraised value of the company's physical property. Roughly, indeed, this is a correct measure in an open market of what people think the franchise is worth. There are, however, so many different considerations entering into the market price of corporation securities, that in some cases the result obtained by this method will be far from the actual value of the securities for investment purposes. Stocks sometimes have a fictitious value on the market as a result of manipulation or because of their usefulness as a means of controlling the operations of a utility company and the disposition of its earnings. On the other hand, stocks that are not now paying dividends may have a much greater ultimate value than the market quotations would indicate.

Another method of arriving at the value of a franchise is known as the "net earnings rule." There has been much litigation and dispute in New York over the methods of assessment employed by the state board of tax commissioners, but the courts refuse to limit assessing officers to any one method. In a leading franchise tax case decided by the New York court of appeals late in 1909,[1] the net earnings rule was approved as one that could properly be used in making assess-

[1] People ex rel. Jamaica Water Supply Co. vs. The State Board of Tax Commissioners, 196 N. Y. 39. decided Oct. 19, 1909; opinion amplified on motion for reargument, December 7, 1909.

ments, and the method of its application was laid down by the court. According to this decision, the value of the franchise should be ascertained by this rule as follows:

> Take the company's gross revenues.
> Deduct, first, all operating expenses, including all taxes paid and an allowance for depreciation.
> Deduct, second, six per cent on the value of the company's tangible property, including land at its present value, as a fair return upon capital invested.
> Capitalize what is left at seven per cent to get the value of the special franchise.
> Equalize the value so obtained to correspond with the rate of assessment of other property.

The method outlined by the court clearly recognizes the amount of appreciation in land values as an addition to investment capital, and seems to lean toward the cost of reproduction less depreciation rather than original cost as the basis for the valuation of the tangible property. Inasmuch as it is becoming more difficult and expensive every year to find a place for new fixtures in the streets of a great city, the companies first in the street have a great advantage over new companies, if their street plants are to be appraised on the basis of the cost of reproduction rather than original cost. Any increment in the value of pipes, wires, tracks, poles, etc., resulting from the increased cost of labor and materials obviously should not be considered as a part of the value of the intangible right or franchise. On the other hand, any increase in the cost of building a new street plant resulting from the increased congestion of fixtures and traffic in the streets, is, properly considered, an increment of value in the franchise of one already built. This increment is more noticeable in the case of pipes and conduits placed underground, which are practically free from wear and the action of the elements, than in the case of poles and street car tracks, which will have to be replaced sooner or later anyway at the increased cost. It should be noted, however, that the renewal of an existing plant is less expensive than the construction of an entirely new one, for the reason that the existing plant already has its location in the street.

548. Uses and abuses of franchise taxation.—The practical purpose of the franchise tax is generally either to secure for the city or the state additional revenue, or to shift upon public

service corporations a portion of the burdens of government borne by other tax-payers. The practical effect of the franchise tax, no matter what particular form it takes, other than that of a tax on dividends or net profits, may often be to cripple the service or to endanger the capital invested, or both. As already stated, in the opinion of the author the taxing power may be used legitimately to bring companies having so-called perpetual or unlimited franchises to their knees and compel them to surrender their extraordinary privileges for rights of service under strict public control in accordance with the genius of modern political science. Frankly, this means that the state is justified in attacking indirectly the improvident and corrupt franchise-contracts that would now be *ultra vires* if the public authorities had the thing to do over again. The ethics of this proposition is a matter of fierce dispute. Some will say that the city ought to stand by the ruinous bargains of the past, entered into ignorantly or corruptly, in order not to weaken the general standard of "good faith," which holds society together. It is the view of the author, however, that the highest ethics requires this generation to recover and keep by whatever means are available the complete control of the public streets as an essential portion of sovereignty. "Vested wrongs" are not sacred. Taxation is a milder and more orderly remedy than revolution and confiscation. If the courts will not directly reverse the Dartmouth College decision that the granting of a governmental privilege is the granting of an irrevocable property right, at least they may not be condemned if they let us use the taxing power and the police power to pry loose the perpetual grip of private corporations upon the public streets.

The ideal condition is where the franchises have no value to be taxed. This state of affairs can be induced, even in stubborn cases where companies are firmly entrenched, by a judicious combination of police regulation and franchise taxation.

CHAPTER XLV.

CAPITALIZATION, CAPITAL VALUE, APPRAISALS AND PURCHASE PRICE.

549. Par and market values of public utility securities.
550. Relation of stocks to bonds.
551. Water: bond discounts; stock dividends; mergers and consolidations.
552. Sale of new stock.
553. Confusion of construction and operating accounts: unearned dividends; renewals added to capital; additions and betterments out of earnings.
554. Capital value: the basis for rate regulation and purchase price; bearing upon service regulation.
555. Cost of reproduction vs. actual cost.
556. Overhead charges: preliminary and organization expenses; superintendence; contractor's profit; interest during construction; brokerage; insurance; operating deficits.
557. Right of way: cost of franchises; easements; damages to abutting owners; litigation; pavement; widening and reconstruction of streets and bridges.
558. Intangibles: monopoly rights; developmental value; good will; going value.
559. Appreciation and depreciation in land values, labor and materials, easements and franchise rights.
560. Depreciation: normal wear, obsolescence, inadequacy, age and deferred maintenance.
561. Ratio of earnings to capital investment.
562. Amortization of capital.
563. Purchase price; terms of payment; conditions of transfer.

549. Par and market values of public utility securities.—It has recently been proposed in New York to amend the stock corporation law so that a share of capital stock would have no stated or par value, but would merely be a certificate of ownership of a certain undivided portion of the net assets of the corporation. This legislation is proposed in recognition of the difficulty of keeping the par and market values of general corporate stocks approximately equal and of the abuses inherent in a wide divergence of such values. Public service corporations occupy a class by themselves in regard to this matter. On account of the public nature of their business, their monopoly privileges, their assured income and the fixing of their rates by franchise contract or by legislative act, the speculative element ought to be almost entirely absent from public utility investments. It will hardly be denied that

security of capital and approximate certainty of a fair but not exorbitant profit in connection with enterprises performing definite public services, using public property and subject to public regulation, are desiderata of great importance. The use of a public franchise supplies the justification and the regulation of rates and service furnishes the opportunity for the maintenance of substantial equality between the par and the market values of the securities of a utility corporation. The difficulty of maintaining such equality, if equality is once recognized as desirable from the standpoint of the general public, is, therefore, much less in the case of public service corporations than in the case of other stock companies. At the same time, the evils that result from divergent, uncertain and changing values of public service securities are especially grave, for the very reason that the public faith is involved and public convenience and necessity are dependent upon the continuous maintenance of public credit. A public utility is altogether too serious a matter to be gambled with. A certificate of stock or a mortgage bond that bears on its face a stated value of $100 or $1,000 ought to represent not only that amount of actual investment but also that amount of actual present value. Inasmuch as this equilibrium can be approximately maintained by the legitimate and necessary exercise of state and municipal supervision, it is unnecessary, in the case of public utility corporations, to resort to the species of legislation referred to at the beginning of this section, and, being unnecessary, it appears to be quite undesirable, for the reason that public utility securities should have a definite and easily ascertainable value.

550. Relation of stocks to bonds.—Under old methods of financing, public utility stocks have often been issued by the promoters of a particular enterprise either to themselves as a means of their reaping the speculative profit for which they went into the project, or to the purchasers of bonds as a bonus or extra inducement to the investment of capital. Often, indeed, stocks have been issued for both these purposes. The more freely these practices have been followed, the more speculative have become not only the stocks, but even the bonds of public service corporations. The Massachusetts theory that a company should not be permitted to issue bonds in excess of a certain fixed proportion of the actual in-

vestment is based upon the same considerations that prevent conservative banks and other financial institutions from taking mortgages on real estate for more than half or two-thirds of its estimated value. This policy aims to make a mortgage bond a steady, safe and non-speculative security, leaving to the stockholders, who have immediate control of the property and have put up a part of the capital, both the risk of loss and the chance of gain. If the stockholders furnish one-half of the money and borrow the other half on five per cent bonds, for every one per cent net income on the entire investment above the interest rate, the stockholders get a two per cent additional dividend. If the net income, on the other hand, is only four per cent on the entire investment, the stockholders will get a dividend of only three per cent. In short, the smaller the ratio of stock investment to bond investment, the greater will be the fluctuations in the dividend rate and the more danger there will be that the stocks cannot absorb possible or probable losses. A public utility built by adventurers wholly out of the proceeds of bond issues is pretty sure to be exploited for the purpose of giving a fictitious value to stocks that represent no investment. The adventurers then unload their holdings on the public and pass to other fields of high endeavor. In so far, however, as public utility accounts and expenditures are brought under strict public control, conservative management compelled and adequate rates to produce a reasonable profit authorized, the speculative element in public utility investments diminishes and the proportion of the total capital that can safely be raised by the issue of bonds increases. From the standpoint of the utility itself, so long as public regulation is an effective substitute for the risk of real capital by the stockholders in compelling safe and progressive management, an increase in the ratio of bonds to stocks is beneficial; for the rate of interest on bonds is usually lower than the minimum rate of profit on investment which the courts are inclined to allow to public utility properties in rate cases. Consequently, under these circumstances, the greater the proportion of the investment supplied by the issue of bonds, the safer and more attractive will be the stock and the less niggardly will the management, of necessity, be. Ultimately, indeed, the reduction in fixed charges will result in a lower minimum rate

of profit allowed by the courts, and that will mean a cheapening of the cost of service to the consumers.

551. Water: bond discounts; stock dividends; mergers and consolidations.— "Water" in public utility securities may be defined as H_2O—a mixture of two parts Humbug and one part Optimism. It is injected into securities by various well-known processes. Bonds may be sold at a heavy discount on the plea that the rate of interest is too low or that the security is insufficient; or bonds may be issued to contractors on construction account without any precise relation to the actual cost of construction. In any of these cases the par value of the bonds, no matter how much it may be in excess of the cash investment, becomes an obligation against the property irreducible except through bankruptcy. Bond issues that are part water through choice of those in control of the company are wholly indefensible. The plea of necessity is often raised, however, in defense of bond discounts of from five to thirty per cent of par value on the theory that the bonds cannot be marketed on any other basis and the company has to have the money. Where this necessity exists it is usually a prophecy of future bankruptcy, if not a proof of present insolvency. The allowance of bond discounts is false capitalization. Though the interest rate may be lower, the total interest paid on the entire issue of bonds sold at a discount will probably be about equal to the total interest paid on the smaller amount of bonds that would be required to provide the same amount of capital if sold at par. The net result is a wanton addition of the total amount of the discount to the company's permanent capital liability. If, in particular cases, the purchasers of bonds are willing to accept a lower total of interest for a given amount of money because they are assured of the return of more than their principal at the time when the bonds fall due, then the net result of the transaction is to capitalize current obligations to the extent of the saving in interest. This practice cannot be justified under any circumstances except possibly for the relief of a new enterprise during its first years of operation where a future increase in net revenues is practically certain, and then only if provision is made for the amortization of the discount at the earliest possible moment.

Stock dividends are sometimes issued in cases where the

value of the property has greatly surpassed the par value of outstanding securities. The issuance of additional stock to security holders without payment is for the purpose of bringing nominal capitalization nearer to actual value. In purely private corporations perhaps there is nothing reprehensible in this practice, but in public service corporations the equalization of property value and capitalization should be brought about by the reduction of rates and the improvement of service, which would keep or bring the property value down, instead of by the increase of capitalization to fit it.

It sometimes happens in connection with mergers, consolidations and reorganizations that two plus two are made to equal six, eight or ten. Monopoly is capitalized. The economies of consolidation and unity in operation are capitalized. Good will is capitalized. Franchise values are capitalized. Promotion is capitalized. It is the all but universal tendency of public service corporations to capitalize everything that can be capitalized. The enterprise becomes more powerful as it becomes a greater vested interest. The men in control get richer as the quantity of marketable securities issued on the basis of no investment at all or only a partial investment increases. But however serviceable they may be in strictly private enterprises, humbug and hope are very unsatisfactory bases for public utility capitalization. All "water" should be excluded.

552. Sale of new stock.—A prosperous company, engaged in the performance of a public service in a growing community, needs to increase its investment from time to time. New capital may be secured through the issue of bonds so long as the total amount of bonds outstanding does not exceed the proportion of the entire capitalization which in law or public policy is allotted to bonds. In many cases, however, it is necessary or desirable to raise all or a portion of the new capital needed by the sale of additional stock. In Massachusetts the state board of gas and electricity commissioners is required to fix the value of new stock about to be issued by companies under its jurisdiction. If the existing stockholders are unwilling to subscribe for the new stock at the price fixed by the board, then the stock has to be put up at public auction to be sold for the best price obtainable. One grave objection to this practice is the fact that it practically insures

the old stockholders against any regulation of rates that would diminish the value of their stock. If for new stock $150 is paid for $100 par value, naturally the fair return upon investment necessarily allowed will permit a dividend 50 per cent higher than would be necessary if each $100 of capital stock represented only $100 of investment. But the original stockholders who paid only par for their holdings are protected in the enjoyment of the same dividend rate that is applicable to the new stocks in which $150 has been invested for every $100 of par value. This result is inconsistent with the rule I have already suggested that par value and market value should be kept as nearly equal as possible, and that where necessary rates should be reduced and service improved to keep market values down.

In states where there is no effective regulation of stock and bond issues, it often happens that the directors and stockholders of a prosperous gas, electric or telephone company show unmistakable and somewhat mysterious symptoms of progressiveness. They are not only willing but anxious to push their lines out into undeveloped and suburban territory. The secret of it is that they are enabled by a policy of expansion demanding new capital from time to time to issue new stock to themselves at par. So long as the earnings of the entire system are sufficient to keep up the dividends on stock, the insiders put into their own pockets the difference between the market and the par value of the new stock. Indeed, by adding interest during construction to capital account, and by maintaining dividends at the expense of surplus or of proper operating and depreciation charges, the process of milking the utility may be carried far beyond the point where the plant as a whole is earning the dividends paid. The only safe way is to have stock sold at par and keep the market value down by regulation.

553. Confusion of construction and operating accounts: unearned dividends; renewals added to capital; additions and betterments out of earnings.—In the book-keeping of a public service corporation, it is fundamentally important that construction and operating accounts be kept scientifically distinct. To pay interest on bonds out of money secured by the issue of more bonds, except during the period of construction, or to pay unearned dividends on stock during construction or

at any other time, is either self-deceptive or fraudulent finance, and should not be permitted in any public business. When operation begins, if revenues are insufficient to meet operating expenses and pay interest on outstanding bonds, the temporary deficit should be carried as a floating debt to be paid off out of future earnings in advance of dividends. This deficit should never be permanently capitalized. If the deficit continues so long that bonds have to be issued to cover it, provision should be made for the amortization of these bonds before profits are distributed to stockholders. It is proper, however, that a reasonable dividend on fully-paid capital stock should be a cumulative charge against surplus.

In the days of unregulated book-keeping, renewals of plant have often been charged to capital account. It is obvious that a plant should have paid for itself before it is worn out. Neglect of repairs or the failure to set aside an adequate depreciation fund in advance of dividends is usually responsible for this duplication of capital. In the swiftly-moving panorama of invention and development it has often happened that expensive equipment has become obsolete before it was worn out. Changes of motive power in street railways and the substitution of improved equipment in other utilities have frequently become necessary before the original investment in the structures to be discarded has been written off. The result has been the loading up of the utility with dead capital. Renewals and replacements, whether made necessary by wear, obsolescence or inadequacy, are properly chargeable to operating expenses to the full extent of the original cost of the parts renewed or replaced. If the changes come so rapidly that they cannot be taken care of in that way, the deficit should be treated in precisely the same way as a deficit resulting from undeveloped revenues during the first years of operation. The changes would not be made unless they were expected to increase revenues, to decrease operating expenses or to relieve intolerable conditions of service. In no case should construction that has disappeared be permanently capitalized. While a deficit in assets remains on account of renewals or replacements, the practice sometimes followed by prosperous companies of making additions and betterments out of earnings is not only permissible, but praiseworthy. When, however, the actual construction cost of live property

is equal to capitalization representing cash investment, and adequate provision is being made for maintenance and depreciation, a public service corporation should not be permitted to make further additions and betterments out of earnings unless the franchise provides for a fixed purchase price for the property or a fixed capital value upon which the company will be allowed a reasonable return. It is especially necessary that companies which have watered their securities should not be permitted to give them full value by putting enough earnings into the construction account to offset the water. In other words, a public utility company, depending as it does upon a special franchise in the streets, should not be permitted to add to the capital account of its plant out of revenues collected from the people. All investment out of earnings not required to make good the losses through obsolescence and depreciation should be treated as capital furnished by the city, and should not be added to the value of the plant either when the price at which the property may be taken over is being fixed or when the company's investment is being determined for rate-making purposes and interest and amortization allowances.

554. Capital value; the basis for rate regulation and purchase price; bearing upon service regulation.—It follows from what has already been said that although capitalization and capital value should be kept as nearly equal as possible, they should not be confused with each other. Capitalization is the aggregate par value of the stocks and bonds issued against a public utility property. Capital value is the aggregate of live investment which determines, subject to certain qualifications, the price at which the property may be taken over by the city or by the city's licensee, and also forms the basis upon which the company's fixed minimum return for interest or dividends should be reckoned. Capital value represents the company's present investment in the property. When extensions and betterments are made with new funds furnished by the company, capital value increases. When additions and betterments are made out of earnings, it remains the same. When amortization results in the actual turning over to the company of funds derived from earnings for the retirement of stocks and bonds, capital value diminishes. When amortization funds are permitted to accumulate

in the hands of trustees or when the sinking fund for the purchase of the property is maintained by the city out of its share of net profits or out of regular amortization contributions from the earnings of the property, capital value remains unchanged.

Unquestionably the courts will not permit the rate fixing authorities to reduce utility charges so low as to render it impossible for a company to earn a fair return, say six per cent, upon capital value as here defined. There is some dispute, however, as to the bearing of capital value upon service regulations. It is firmly held by some that a public utility corporation is bound to render adequate service whether it makes any profit or not. It is asserted that this primary obligation was assumed by the company when it took out its charter and accepted its local franchise. If it cannot extract a profit from rendering adequate service, let it withdraw from the field and give someone else a chance. This reasoning is sound, if proper consideration is given to the determination of what is adequate service. It is obvious, however, that any company could be driven into bankruptcy and its property destroyed by unreasonable and extravagant service regulations, with the rate of charge for the service remaining fixed. It must be admitted, therefore, that even in the regulation of service some account must be taken of the capital value of the company's plant and the earning capacity of the plant at the rates fixed. Service that would be inadequate in the case of a highly-prosperous utility, may be considered adequate, under all the circumstances, in a utility that is paying no dividends. Nevertheless, the question of adequacy of service is primarily one of reasonable demand, general conditions being considered, rather than one of profit to the particular company at the particular time. If experience shows that the quality of service demanded could not be rendered at a profit by companies generally under similar operating conditions, the demand may properly be considered unreasonable.

555. Cost of reproduction vs. actual cost.—The relations of American cities to their public service corporations have been very loose and unscientific. As a result, almost everything got started wrong. In the readjustments made necessary by the development of enlightened public opinion and the vital needs of rapidly growing urban populations, we have to do

the best we can under the circumstances. Unquestionably the genius of public utilities as set forth in preceding sections and chapters of this book demands that the capital value of a public utility should be based upon actual construction cost, less depreciation through wear, neglect, inadequacy or obsolescence. The fact that the public utility business got started wrong, using inadequate systems of accounts, having no effective publicity of financial operations and falling into grievous temptations as a result of municipal ignorance, negligence and corruption, makes it wholly impossible in many cases to ascertain at this late day, the actual original cost of a utility. In place of actual cost, the cost of reproduction has been frequently used as a basis for appraisals. The cost of reproduction means the cost of building a new plant in every respect like the existing one, except as to depreciation, if the existing one were out of the way, and of building it under the conditions that now exist. Land values may have greatly appreciated, the subsurface of the streets may have become much more crowded with fixtures and the surface of the streets much more congested with traffic, the cost of materials and labor may have increased, the rate of interest may have changed, the difficulties of securing franchises and easements may have multiplied, and so on. The cost-of-reproduction theory allows all of these increments to capital value without reference to original cost. On the other hand, however, dead capital representing discarded, worn-out or obsolete equipment is excluded from consideration, and ordinary depreciation is written off from the total. In most cases, except where ruinous experiments or misfortunes in the actual development of the utility have swallowed up great amounts of capital that has not been made good out of earnings, the cost of reproduction of a public service plant in a community of increasing population and rising prices will be greater than the actual cost of the existing plant. Mr. John W. Alvord, a well-known Chicago engineer with wide experience in the appraisal of water works plants, has pointed out that the cost of reproduction logically includes not only the cost of reproducing the physical plant but also the cost of reproducing the income of the plant.[1] "The theory of reproduction is

[1] "Notes on Going Value and Method for its Computation," reprint of a paper read before the American Water Works Association at Milwaukee, June, 1909.

not simple," Mr. Alvord believes, "but exceedingly complex, so complex, in fact, that it is a serious question whether courts and appraisers would not find it advantageous to ascertain what has been the past actual honest investment in any given plant and property, regardless of its appreciations or depreciations. It is not always possible to ascertain such information, and in many cases, doubtless, it will be impossible, but there is no question but that where it is possible it affords a simple and satisfactory method of valuing for the purpose of basing a fair return, while for the purposes of sale or transfer some limited inquiry into appreciation and depreciation should be made in addition."

It is quite possible that in fixing capital value, as in assessing the value of franchises, different principles can be applied to advantage in different cases. Certainly the cost of reproduction including the appreciation in land values and the cost of reproducing income would in many cases result in a capital value so high as seriously to cripple service at existing rates and to make amortization or purchase practically impossible. Neither of these results should be permitted in a readjustment of franchise relations. It may be, of course, that in some cases existing rates, especially telephone rates, are too low, but no company should be permitted to capitalize unearned increments and thereby render necessary an increase in the rates under which it has been operating. I am inclined to the opinion that an appraisal for the purpose of fixing capital value should be based primarily on the actual cost of the existing plant, supplemented where necessary as to particular items by an estimate of the cost of reproduction adjusted to probable actual cost by known appreciations and depreciations.

556. Overhead charges: preliminary and organization expenses; superintendence; contractor's profit; interest during construction; brokerage; insurance; operating deficits.—The term "overhead charges" is somewhat technical. It does not mean the cost of overhead equipment in the streets. It means the indefinite element of cost over and above the enumerated items of expenditure. It has to be estimated, as it is not a separable and precise charge against any particular physical structure. If a utility plant is built up from the beginning and then operated by a single company having no other busi-

ness and reducing its charges for promotion, legal services, engineering plans, superintendence and so forth to a definite money basis, paying for every service as it is rendered and making no contingent allowances, the so-called overhead charges will be accounted for as definite elements in a definite cost. Plants are not usually built in that way, however. There are preliminary and organization charges not definitely translated into money at the time. The plant may be constructed by a contractor for a lump sum in cash or securities. Superintendence may be divided. Time and energy may be spent on plans without being fully accounted for. The fact that an operating company, like a city, often finds it desirable to construct its works by means of a contractor, leads appraisers in fixing the cost of reproduction to add a contractor's profit to the actual cost of work and materials. It is often assumed that if the company was its own contractor in construction, it should be allowed a like profit in excess of actual cost. Interest on bonds during construction is, of course, a legitimate overhead charge. So also is insurance during construction. Brokerage is often allowed to cover the cost of selling a company's securities. This allowance, however, does not seem to be a legitimate one. The rate of interest on bonds should be sufficient to induce the brokers to underwrite them at par. In that case the expense of selling them will be ultimately carried by the utility in the form of a slightly increased interest charge rather than as a permanent addition to capital value.

Operating deficits undoubtedly represent actual expenditures and should be taken account of in a readjustment of franchise relations. If the company has already made good such deficits by subsequent profits in excess of the minimum rate to be allowed, no further consideration should be given to the matter. If, however, the deficits have not been made good, it may be desirable to take account of them in the form of a bonus in excess of the capital value in case the property is taken over within a fixed number of years after the deficits occurred. Indeed, while overhead charges are undoubtedly to be considered in connection with the appraisal of a utility property, most of them ought to be taken care of as soon as possible by amortization, or, if they have not been included in permanent capitalization, then by an allowance of surplus

profit. The consumers of a public utility which has been yielding extraordinary profits ought not to be required to sustain as a continuous burden a capital value including the overhead charges that should have been written off next after the payment of the fixed minimum return on original investment. One of the great dangers in an appraisal is that overhead charges will clamor for recognition under so many different names as to create an exaggerated impression of their importance.

557. Right of way: cost of franchises; easements; damages to abutting owners; litigation; pavement; widening and reconstruction of streets and bridges.—Public utilities using the streets exclusively for their distributing systems have their primary right of way furnished by the city. If the companies pay in a lump sum for their franchises, such payments are really for rights of way, and should be capitalized. Where the companies are required to compensate abutting property owners either by the purchase of consents or by the payment of damages, these items of cost are also to be included in capital value. In an appraisal of existing property, original cost should be taken in the case of both franchises and easements from property owners. It would be wholly inexcusable to capitalize against the public the increased value of these rights. In the cost of franchises and consents should be included the necessary expenses of advertising, litigation, etc., incidental to their original procurement. This does not include the cost of buying the votes of aldermen or of contributions to the political boss, however necessary for the procurement of franchise rights these expenditures may have seemed to be at the time. The cost of litigation in defense of property owners' suits, in defense of franchise rights or in resistance to the claims of the city or the state, incurred subsequent to the commencement of operation, should not be capitalized, but should be paid as an operating expense.

There is one other important element in the cost of right of way that applies particularly to street railways. I refer to the pavements required to be laid by the companies. Where original paving is required of them or where they have to replace pavements originally laid by the city or by the abutting property owners, or where they have to pay a lump sum for pavement already laid, the cost is a legitimate addition to

capital investment even though title to the pavement vests in the city. The maintenance and renewal of pavements once laid by the companies, unless the new pavements are more expensive than the old, should, obviously, be charged entirely to operating expenses and not to capital account.

Occasionally street railways are required to widen the streets through which they pass, to contribute to the cost of grade separation, or to strengthen or reconstruct the highway bridges they use. All such expenses are a legitimate part of construction cost and should be included in an appraisal of the companies' property, but on the basis of original, not of reproduction cost.

558. Intangibles: monopoly rights; developmental value; good will; going value.—While a public utility is a natural monopoly within a given operating area, it seldom enjoys a legally exclusive franchise. Potential competition, even though actual competition would be illogical and expensive, tends to limit the value of the franchise. Where a legally exclusive franchise has been granted, the city is at a comparative disadvantage when the question of an appraisal for the purpose of fixing the capital value of the utility comes up. While franchise values, except to the extent they have been paid for originally, are not properly included in capital value, it is practically necessary to make allowance for them on a readjustment of relations between the city and the companies arranged prior to the expiration of the franchise periods. If the franchise is exclusive, so that the city is foreclosed from establishing a competing municipal system or from introducing competition by giving another company rights in the same territory, the value of the company's rights will be greater than would otherwise be the case. Franchise values are usually estimated on the basis of net earning power for the remainder of the life of the franchises, discounted to present value. If franchises are perpetual, have a net earning power and a prospective increase in annual value, their present capital value may be very great. Unless their earning power is protected, however, by a binding contract with the city or the state authorizing their owners to keep on charging a specified rate, their future value is subject to diminution by the reduction of rates. In any case there is a great element of uncertainty in the earning power of a franchise in the

somewhat distant future. The taxation of franchise values, the increase in the difficulty and expensiveness of operation in crowded city streets, higher standards of service and decreasing value of a given sum of money, all tend to blast the extravagant hopes of franchise-holders. Some of the street railway franchises in the streets of New York that fifteen years ago were regarded as gold mines are now of very dubious value. If the present owners could get the full value of their physical property with nothing at all for the franchises, they would probably be delighted to get their money out of the street railways. This statement, of course, does not apply to the owners of lines now leased to an operating company at a high rental. Whenever franchise or monopoly rights are appraised as a part of capital value, this portion of the capital should be amortized as speedily as possible. That franchise values should be permanently capitalized is abhorrent to all rational principles of civic economy.

Companies sometimes claim large intangible assets under the name of development value, good will, going value, etc. Where a company has entered into a sparsely settled territory, introduced a utility and operated at a loss or at a very small profit for a period of years until the district has been built up and become highly profitable, a claim is likely to be made covering not only actual expenses and losses of the past but a very considerable bonus for the present and future. Developmental value is, perhaps, most often claimed in connection with transit facilities. Whatever virtue there may be in this claim, it certainly does not apply when the capital value is being fixed as a basis for a fair annual return on investment. When capital value is made the basis of purchase price, developmental value should be recognized, if at all, in the form of a bonus in excess of the appraised value of the physical property. If the franchise has to be paid for, developmental value will be included in that.

"Good will" should not be considered in the appraisal of a public utility plant. Under ordinary conditions, the will of the consumers, whether good or bad, makes very little difference in the amount of the utility consumed. The service is necessary and there is only one place to go for it. So there the people go. While the use of a utility may be considerably increased by a decrease in rates or an improvement of

service, a new management can get it or keep it without buying it of the existing company.

"Going value", in Mr. Alvord's opinion, is an important element in the cost of reproduction. It is, in fact, measured by the cost of reproducing present income starting with a new plant just ready for operation. On the other hand the late Judge Robert W. Tayler, in appraising the Cleveland street railway property in 1909 said: [1]

"I allow nothing for going value. Going value raises a question of definition, and it is sufficiently disposed of, according to my view, by saying that it only has a value, as applied to a street railroad enterprise, because of the expense incident to organization, superintendence, administration, legal expenses and interest during construction: it is involved in the general subject of necessary overhead charge and arises only out of, and is to be defined and limited entirely by, the money necessarily expended to put it into the shape where it has value as an operating instrumentality. Beyond that, I recognize no value to going value or no such thing as going value to be applied to a street railroad enterprise."

559. Appreciation and depreciation in land values, labor and materials, easements and franchise rights.—The United States Supreme Court in the eighty-cent gas case of the Consolidated Gas Company, and the New York court of appeals in the franchise tax case of the Jamaica Water Supply Company, both of which have already been referred to in this book,[1] have held that public service companies are entitled to a fair return upon the present value of their property, including land. The New York court qualified its opinion by saying that if the application of this rule resulted in such a high valuation of the land as to leave the water company's franchise without any value at all, it would show that the net earnings rule could not be applied to the assessment of the franchise in that particular case. The decision of the courts to the effect that a company must be allowed rates high enough to give a fair return upon the present value of its property, including the unearned increment of land values, might be severely criticized, if it would do any good. It is inconsistent with the theory of the proper relations between public utility investors and the public which has been elab-

[1] Opinion handed down December 18, 1909, in United States circuit court room at Cleveland, Ohio.

[1] Volume One, Section 47, and *ante*, Section 547.

orated in this book. The decision is founded on old conceptions that seem to be passing away. It is unfortunate that the law should have been fixed by the highest court of the land just before the advance in public sentiment on public utility questions and the progress of the theory of public utility functions could make the decision impossible. A way out of the difficulty may be found, however, even if the present rulings are not reversed. It has been urged by eminent specialists in public utility matters that if the companies now have as a part of their capital investment enormous land values not accounted for in original cost, they must have secured this additional property in the shape of income. Hence, the companies should be charged with the annual increment of their land values as a part of income. If this suggestion were carried out, it is obvious that the amount of revenue necessary to be derived from rates in order to give a fair return upon capital would be diminished by the amount of the annual increment in land values charged as income. This may prove to be a practical solution of the difficulty in those cases where capital value is not fixed by contract.

Wherever franchise readjustments are made, however, the rule should be put into effect that lands held by public utility companies necessary to the performance of their functions should be counted in capital value at original cost without regard to appreciation or depreciation. This rule is just, because all the expenses of developing the property and paying the taxes on it are taken out of earnings prior to the allowance of a minimum profit on investment which the courts require.

The increment of value in labor and materials could be allowed to the company's capital account with less injustice than the increment in land values, for the reason that at some time or other, if the company continues in business it will practically have to renew its plant at the increased cost. It is illogical and unjust, however, that this increased cost should be capitalized before it is incurred. Perhaps a period of depreciation in the value of labor and materials may ensue before the plant has to be renewed. In that case the allowance of the increment of value in the meantime would be the recognition of a purely imaginary investment. The more one

looks into the subject, the more he is inclined to agree with Mr. Alvord that original cost is the right starting-point in determining capital value.

Appreciation in the value of easements and franchise rights is like appreciation in land values, except that the public interest in this appreciation is more obvious, and the value itself is directly influenced by the conditions of the franchise and the subsequent regulation of rates and service. The courts have not held that increase in franchise and easement values should be recognized as a part of capital value. Accordingly we are left free to appraise these values on the basis of original cost.

560. Depreciation: normal wear; obsolescence, inadequacy, age and deferred maintenance.—A public utility plant that has long been in use, no matter how well it is maintained, shows depreciation through normal wear. Some of the fixtures will last only a few years; some will last indefinitely. One item of public utility property, namely land, is likely to be more valuable the older it gets. Taking only the portion of the plant that is constructed, normal wear will effect a certain inevitable depreciation. The gross earning power of the property will not be diminished, but a certain portion of the original plant will have disappeared never to be restored to the plant as a whole. This is called normal wear. The amount of it should be ascertained and should be treated as a deduction from original cost or cost of reproduction in fixing present capital value. It is sometimes urged that there is no need of allowing for this inevitable depreciation inasmuch as the earning power of the plant is not affected. It is only the *gross* earnings, however, that are not affected. The net earnings are reduced because of the necessary increase in the expense of repairs and maintenance of an old plant as against a new one. Accordingly, the portion of the capital that has been actually consumed should have been amortized and taken out of the business. It should not be considered as being still in the property when an appraisal is made. The extent of this necessary depreciation is different in different utilities and under different conditions. Normal wear is probably greater in a telephone plant than in most other utility properties. The Cleveland street railway franchise fixes 70 per cent of reproduction value as the standard of

maintenance to be kept up by the company. Mr. Bion J. Arnold, president of the board of supervising engineers of Chicago, testified in one of the Coney Island fare cases before the New York City public service commission that in Chicago they hoped to be able to maintain the rehabilitated street railway system at an 85 per cent standard of reproduction value. These standards represent two extremes in what is considered efficient maintenance of street railways. It follows that in a well-maintained street railway plant, from 15 to 30 per cent of its cost as new will permanently disappear.

Depreciation on account of obsolescence has been startlingly rapid in periods of development. This is especially true of the great electrical utilities—electric light and power, the telephone, the street railway. Obsolescence at certain periods of development has been so rapid that it could not be taken care of out of earnings and has compelled the adoption of the improvident policy of charging replacements to capital account. Some of the dead capital has been worked off through bankruptcy and reorganization. Some has been replaced by investment out of earnings. Some still hangs as a dead weight upon operating plants. There is some reason to expect that in the electrical industries at least, which have brought a series of great utilities to a high state of development, revolutionary changes will be less rapid in the future, with the result that depreciation from obsolescence will be more easily handled than in the past. At any rate special deductions should be made from cost valuations to the extent of actual obsolescence of the equipment in use at the time of an appraisal.

"Inadequacy" and "age" are terms used to describe special kinds of depreciation. The former applies, for example, to a power plant or a car barn which, though in excellent condition, has been rendered inadequate by the increase in traffic. A company may find it more economical to tear down and build greater, or perhaps to build greater at an entirely new site, than to try to enlarge the existing establishment, or to build an additional separate unit to meet the increased demand. In such a case the old building has to be abandoned or torn down. Its cost value has been reduced through depreciation on account of inadequacy to its salvage value. Depreciation on account of age applies to a building

which after a certain length of life will have to be replaced. This depreciation is only slightly different from normal wear. It is the wear of time. Inadequacy and age both furnish deductions from cost value as determined by appraisal.

There remains to be mentioned the depreciation that results from "deferred maintenance," that is to say, from inefficiency and neglect. This is the kind of depreciation that may be looked for in a plant that has been under the control of high financiers whose chief interest has been in manipulating securities rather than in running a public service plant. Of course, poor management and poverty will foster this kind of depreciation no matter how good the intentions of the men in control may be. Deferred maintenance is the worst enemy of the public connected with public utility operations. In appraisals it is proper to hew to the line wherever depreciation of this sort is found. It generally means that the utility cannot be well managed until it is placed in other hands.

561. Ratio of earnings to capital investment.—The street railways of Chicago during the first year under the settlement ordinances, that is to say, for the year ending January 31, 1908, had gross revenues equal to a little more than 33 per cent of the capital value. To furnish money to pay five per cent on the investment it took, therefore, about 15 per cent of the revenues. During the third year under the ordinances the ratio of revenues to capital value had decreased to less than 26 per cent so that nearly twenty per cent of the gross earnings were needed to pay five per cent on investment. The New York subway for the two years ending June 30, 1910, had gross operating revenues amounting to about 14 per cent per annum on the total investment for construction and equipment. Accordingly there was required upwards of 35 per cent of gross revenues to pay five per cent interest on the capital invested. In 1907 the gross earnings of all the street and electric railways of the United States as reported to the census bureau were only 11.4 per cent of the outstanding capitalization of these railways. At that rate it would take about 45 per cent of all the revenues to pay five per cent interest on the capitalization of the roads. The ratio of revenues to outstanding capitalization in 1907 was about 24 per cent in the telephone industry and about 13 per cent in the electric light and power business. I give these figures for the

purpose of showing the importance of keeping the capitalization of public utilities down to the minimum and also of keeping the fixed return on investment down as low as possible. A capital value that includes a goodly allowance for franchise value, good will and other financial frills, and a franchise framed on the basis of allowing the company a liberal return upon this padded valuation may easily put a public utility into bankruptcy. Six per cent is sometimes considered a very niggardly return for capital invested in public utilities, but if the capitalization of street and electric railways in 1907 could be taken as an honest measure of investment, operating expenses and taxes with six per cent on the investment would have consumed 115 per cent of the entire revenues. When we remember that in all probability little was set aside for depreciation and nothing at all for amortization, it is not hard to see the direction in which the brilliant financiers in charge of street railways are steering the business. There is something more than franchise taxes the matter with the street railways. These few figures show how imperative it is that in every franchise adjustment the city should fight to the last ditch to keep the appraisal down and to compel the amortization of the investment to be provided for in advance of surplus profits.

562. Amortization of capital.—In any franchise settlement, after the capital value has been hammered down to the lowest practicable figure, the next thing to be done is to establish an amortization fund to wipe out dead capital, franchise values, bond discounts, overhead charges, investment consumed by normal wear, pavement cost, and every other item that has gone to swell the appraisal figures beyond the bare cost of physical property less ample allowance for depreciation. Then, when these things are taken care of, an attack should be made on what is left in capital account. In other words, it is good public policy to force capital out of public utilities as fast as possible instead of letting more in all the time. The constant increase of capitalization which has been the distinctive policy of the past makes additional capital for extensions and improvements more and more necessary. Capital begets capital until the inverted pyramid finally topples over in bankruptcy proceedings. On the other hand, the policy of amortization would make it easier and easier to get

along without new capital, for the reduction in fixed charges would release a constantly growing surplus derived from earnings for use in extensions and betterments. Amortization will help more than any other one thing to change the nature of public utility investments by eliminating risk, reducing the volume of securities and driving the speculators out.

563. Purchase price; terms of payment; conditions of transfer.—The city's option to purchase the plant, which should be reserved in every public utility franchise, ought to make very definite provision as to the purchase price. In general the purchase price is based on capital value. There are certain important elements that enter into the consideration of purchase price, however, which are foreign to capital value as a basis for minimum interest or profit allowances. One of these is the bonus to be paid if the city exercises its option at an early date, before the company has had a chance to recoup itself for losses or lean profits during the first years of operation. If the utility is new or undeveloped this bonus may be from ten to twenty per cent on the appraised valuation of the property. There is some ground for the provision of the Chicago street railway franchises requiring a considerable bonus to be paid in case the property is taken over by another company as the city's licensee instead of by the city itself. At the same time, one of the principal advantages of the indeterminate franchise is the power that it gives to the city to change its agents in the operation of the public utilities. Certainly, the bonus ought not to be paid when the transfer is made on account of inefficiency or disobedience of franchise and statutory requirements on the part of the company in possession. Whatever bonus is required should cover every claim of the company on account of operating deficits or other expenses incidental to the launching of a new enterprise and not properly included in permanent capital value. The bonus should disappear entirely if the city defers the exercise of its option for a considerable period of years.

Another element in purchase price is the amortization fund. The accumulations of this fund should be turned over to the company and the amount be deducted from the appraised valuation plus bonus. It is assumed that depreciation of every kind has beeen allowed for in the appraisal. With the

plant the city should receive all cash on hand including maintenance, accident, reserve and all other funds excepting only the amortization fund.

It is desirable that the city should have the option of taking the property over subject to outstanding bonded indebtedness, or not, as it chooses. It is sometimes thought desirable to provide that the city may pay the purchase price either in cash or in its own bonds bearing a stipulated rate of interest. But if the city's credit is good, it can better dispose of its own bonds, and pay cash. One argument in favor of the cash payment is furnished by the fluctuation in the interest rate on city bond issues. It is impossible to tell for an indefinite period in advance what rate of interest will bring par in the sale of city bonds.

Provision should be made for the transfer of the plant to the city either on a fixed date or upon the payment by the city of the purchase price. Deeds or other proper instruments of transfer should be required for all real estate included in the plant. The whole property should be turned over as a going concern free and clear from all funded debts except such as the city is willing to assume.

CHAPTER XLVI.

MUNICIPAL OWNERSHIP.

564. The political test.
565. The financial test.
566. The theoretical test.
567. Municipal ownership and private operation under lease.
568. Steps preparatory to municipal ownership and operation.

564. The political test.—It has long been acknowledged by substantially everybody that public utilities must either be owned and operated by private companies subject to public regulation or else they must be owned and operated by the city itself. There has doubtless been and still is a great divergence of opinion as to the extent of the public regulation that is necessary as representing the minimum of practical interest which cities may take in public utilities. But this minimum is constantly growing larger and the control generally acknowledged to be necessary is becoming more and more intimate. The complexity and difficulty of public control, either by franchise contract or by police regulation, must be so apparent to anyone who has perused the preceding chapters of this book that, I fancy, my readers would be eager to accept municipal ownership and operation as the simplest and most logical solution of the public utility problem if they were not held back from such a conclusion by certain doubts and difficulties arising from a practical consideration of the forms and methods of municipal administration prevailing in the United States. There is apparently considerable foundation for the despairing observation that municipal operation is "absolutely necessary and absolutely impossible." This book has not been written, however, only to be brought to a close with such a counsel of despair. Briefly, then, we must tackle this final problem of public utility franchises.

When Mayor Dunne of Chicago, an avowed champion of immediate municipal ownership and holding an unmistakable mandate from the people of his city to bring about immediate municipal ownership of the street car lines, sent to Glasgow with a great flourish of trumpets to borrow for advisory pur-

poses the superintendent of the municipal tramways of that most celebrated of all municipal ownership cities, the canny Scotchman observed that in his judgment the political conditions then prevailing in great American cities were not favorable to the success of municipal ownership and operation of street railways. He was allowed to go home as inconspicuously as possible. It is undeniable that the general inefficiency, instability, shortsightedness and extravagence of municipal government in American cities offer a most discouraging outlook for municipal ownership. To many persons this difficulty is insuperable and final. A careful examination of the matter, however, leads to two far-reaching conclusions, both of which completely upset the possibility of such acquiescence. In the first place, it becomes apparent that the police, sanitary and educational functions already entrusted to city governments and which, in the nature of the case, must continue in their hands, are so vitally important to the welfare of the public as to make it impossible for us to "lie down" and let existing political conditions in the cities continue, for their continuance would mean the failure and destruction of our civilization. Municipal politics *must* be regenerated. In the second place, it becomes apparent that the very corruption, inefficiency, shortsightedness and extravagance of which we complain have been and still are being caused in great measure by the parcelling out of public functions and the granting of special privileges in the streets to be used for private profit. The mixture of motives—public welfare and private gain—in the construction and administration of the streets has been largely responsible for the comparative failure of American municipal government. The objection to municipal ownership based on the existing condition of city politics is inconclusive. It has great immediate importance, but we cannot concede its future.

565. The financial test.—The argument against municipal ownership based on political corruption and inefficiency makes a strong point of the financial mismanagement that would result if complex and enormous public utility properties were taken over by the city. This point is well-taken if we fix our eyes solely on the financial practices of city governments generally. But if we glance backward over the frightful financial wreckage strewing the path of private operation, the easy flow

of the logic is rudely interrupted. What could be worse than the financial results of private operation? It is doubtless true that in many instances public service corporations show greater efficiency than city governments in the purchase of supplies and materials and in the exploitation of labor. But the advantages gained in this way generally go to swell the fortunes of a few individuals and thus to develop social conditions obnoxious to democracy and dangerous to the public welfare. In so far as the superior economies sometimes shown by private operation are absorbed by a few stock-jobbers, the argument against public ownership on financial grounds has no weight. It is only where private operation gives better service at the same rates that the argument has any particular significance. On the other hand, it can be said in favor of municipal ownership that city bonds are usually paid when due while public utility bonds are seldom paid at all except by the issuance of new securities. The particular importance of keeping capitalization down to the lowest possible point and of limiting the rate of fixed charges as far as possible has been shown in a preceding chapter. The fact that cities can borrow money at a lower rate of interest than private companies is a powerful argument in favor of municipal ownership, especially of those utilities in which the ratio of gross revenues to operating expenses is relatively low. For example, a difference of one per cent on the investment in subways in New York means a difference of at least seven per cent of gross revenues. One per cent on capital set aside every year and permitted to accumulate at the rate of four per cent annually is sufficient to wipe out the entire capital investment in about forty-one years. It certainly cannot be said that on the basis of the financial test the argument against municipal ownership is conclusive.

566. The theoretical test.—Much as the American people are supposed to despise, on particular occasions, theoretical tests, the history and experience of mankind show that nothing is practical unless it is theoretically sound. Theory is nothing but the exposition of law—the translation of law into rules of action. If a theory will not work after a thorough test, it is evident that something is wrong with the theory. These remarks may be considered "incompetent, irrelevant and immaterial" as constituting a play upon words. All

that is intended is to emphasize the practical importance of theoretical tests in all great undertakings, and the folly of yielding to the personal and temporary prejudices which often parade under the guise of "practical considerations" and are aggressively intolerant of theory.

In the long run, the question of municipal ownership and operation will be determined, not by the test of present political conditions in American cities and not by the test of the comparative results of municipal and private ownership in financial economies, but by what may be called the theoretical test of the nature of public utility functions and the means that must be employed in their performance. So far as the means employed are concerned, all utilities operated under special franchises differ from all other enterprises in one essential respect, namely, the permanent occupancy of the streets with their fixtures. The theoretical nature of a franchise utility is thus reduced in large measure to the theoretical nature of the street. Indeed, the political science of the street is of fundamental importance in most municipal problems. The legal status of the street varies from the old toll roads constructed, maintained and owned by private companies subject to the right of the public to travel over them upon paying lawful tolls, to a modern public street sometimes owned in fee by the city with all its permanent fixtures on, above or beneath the surface city-owned and even its shade trees cared for by a city forester. The theory elaborated in this book is that the streets with everything permanent that is in them should be public property. Such fixtures as cannot be thrown open to the free use of all should be administered for the public benefit and should not in any case be treated as private property to be exploited for profit under special privileges granted to particular individuals or corporations. If this theory of the street is correct, it goes far toward establishing the theoretical necessity of treating a utility depending upon street fixtures as a public function. The supply of gas, electric light and power, or commercial heat and refrigeration could not be considered in itself as a public business, aside from the means necessary to carrying it on, in any different way than the supply of meat, milk, coal or oil to an urban community is so regarded. But certain utilities such as the water supply, sewerage, the tele-

phone, fire alarm service and local transit, are for various reasons essentially public in their nature, even aside from their special relation to the streets. In one case it may be sanitary necessity, in another general safety from fire, in another the relief of congestion of population, in another the monopoly nature of the service, that stamps the business as a public enterprise. Judged by their essential nature and the public necessity, the so-called public utilities can be differentiated, but they all have in common the peculiar use of the streets incident to the construction of their fixtures there. It may be said, therefore, that judged by the theoretical test municipal ownership of all street utilities is logical, if not necessary.

567. Municipal ownership and private operation under lease.—The fact that a utility plant may be roughly divided into two parts, one the fixtures in the streets usually known as the distributing system, and the other the property outside the streets, has suggested to some the possibility of a theoretical dividing line between municipal and private ownership at the street boundary. A city might distribute water, gas and electric current to its citizens almost without going outside the limits of the streets at all, if the supply of these commodities was purchased in quantity delivered at the street mains under certain pressure by private parties. On the other hand a city could not operate a street railway system very well without a car barn, unless the cars were stored in the streets or public squares, but by purchasing "juice" from a power company and by delivering over disabled cars to a private concern for repair, the city could get along without a power house or a repair shop for rolling stock.

While divisions of the kind just described are possible and, in exceptional cases, economical and practical, it can hardly be said that municipal ownership should necessarily be confined to street fixtures, even though the property is to be leased to a private company for operation. There have been a few instances in American cities of the lease of public utility plants owned by the city, but not many. The most notable are the lease of the Philadelphia gas works, where the manufacturing plant as well as the distributing system is owned by the city, and the lease of the Boston and New York subways, where equipment, including rolling stock, power

plant, wires, conduits and, in Boston, even the tracks themselves, is furnished by the companies. Mention may also be made of the lease of the Los Angeles water plant in the early days of that city. The experience of Philadelphia, New York, Los Angeles and Boston cannot be said to show any great improvement in the relations of the city to the companies under municipal ownership and private operation as compared with private ownership and operation under franchises. There has been the same conflict between public interest and private greed and about the same difficulty in enforcing the superior claims of the former. It is quite possible that short-term or indeterminate leases, with strict limitations of profit, might be satisfactory under favorable conditions. But, generally speaking, much the same objections that lie against private ownership under franchise grants, also lie against private operation under lease. In either case the city has admitted into the public service a powerful private agency animated by motives that clash with the purposes of government.

568. Steps preparatory to municipal ownership and operation.—While the argument of this chapter has thus far been favorable to municipal ownership and operation, the author has neither space nor inclination to treat the subject exhaustively in this place. It has been his aim to prove, if possible, that those who have the case all settled against municipal ownership are radically wrong. The question should at least be kept open for future determination. A franchise that ties the city up permanently to private ownership and operation is a relic of the dark ages in municipal politics. All good citizens will rejoice at the arrival of the day when no one can object to municipal ownership on the ground that the city government is unfit to undertake it. Now that the ancient motto—"in time of peace, prepare for war"—is being interpreted as tending to bring about the thing for which we prepare, I would suggest the following as a substitute: "In the era of franchises, prepare for municipal ownership." There are a number of steps that can profitably be taken now without waiting for the final decision as to the general policy of ownership. I suggest the following:

First, clear away all legal and constitutional obstacles to

municipal ownership and operation, so that each city will have a free hand in dealing with the matter.

Second, tax and regulate the life out of perpetual franchises until the companies are willing to give them up for indeterminate grants with a reservation to the city of the option to purchase.

Third, in every new franchise and in franchise readjustments make provision for the amortization of existing capital value, so that when the city gets ready to take over the property, it will not be prevented by the necessity of assuming a burden of debt that is impossible.

Fourth, establish public utility commissions or departments, franchise and accounting bureaus, and other agencies through which the cities will be acquiring knowledge and training men against the day when public utilities may be acquired for municipal operation.

Fifth, remove the curse from municipal government as rapidly as possible by establishing effective responsibility and cultivating efficiency and constructive civic statesmanship.

Sixth, take a wide look around and a long look ahead, link up the problem of municipal franchises with the national conservation movement and kindle a fire under every sleepy citizen till even the street gamins, the club women and the great merchants on Broadway know what a franchise signifies.

APPENDIX.

MINNEAPOLIS GAS SETTLEMENT ORDINANCES.

NOTE—Just as Volume One of "Municipal Franchises" appeared from the press, the city of Minneapolis succeeded in extricating itself from the difficult strategic position in which it had been placed in regard to its gas service by the liberality of the aldermen of 1870. The old franchise was described in Section 254, Chapter XX, of this book. In order to bring the record up to date and for the reason that the two new gas ordinances of Minneapolis, one a franchise ordinance accepted by the company and the other a regulatory ordinance enacted under the police power, are almost in a class by themselves, I am reproducing in this appendix the two ordinances, substantially in full.—

THE AUTHOR.

I. THE FRANCHISE ORDINANCE.

Passed by the City Council of Minneapolis, February 23, 1910; in effect without the approval of the mayor, and accepted by the company.

(Preamble omitted).

The City Council of the City of Minneapolis do ordain as follows:

Section 1. Surrender of right to purchase.—That the city, in consideration of the agreement of the Minneapolis Gas Light Company its successors and assigns, to comply with, abide by and keep and perform all of the terms, conditions and requirements of this ordinance, on its part to be complied with or performed as herein specified (which agreement is to be expressed as provided in Section 15 of this ordinance) hereby expressly waives and surrenders its right, privilege and option to make the purchase mentioned, set forth, declared, and provided for in and by Sections 9 and 10 of the ordinance entitled, "An ordinance granting to certain persons the right to manufacture and sell gas in the City of Minneapolis," passed by the Common Council of the city on the 21st day of February, 1870, and approved on the 24th day of the same month; provided that such waiver and surrender by the city shall at all times be subject to the provisions of Section 12 hereof; and provided also that nothing in this ordinance contained shall be taken or construed to impair the right or power of the city to acquire any or all of the property of the company by the condemnation thereof, in the exercise of the right of eminent domain conferred or granted by any statute of the State of Minnesota now or hereafter in force.

Section 2. Price of Gas.—That the company shall on the first day of the month succeeding the acceptance of this ordinance put into effect a price of eighty-five (85) cents per thousand cubic feet of gas delivered to private consumers and a price to the city for gas supplied to city gas street lamps and to the buildings of the city, and of the various boards and departments thereof, of sixty-five (65) cents per thousand cubic feet, which price to private consumers and to the city shall not be increased until the rates and prices for gas shall be again fixed and determined as hereinafter provided. All bills to private consumers may be rendered at a price which shall exceed by fifteen (15) cents per thousand cubic feet, the price herein specified or hereafter fixed and determined as provided in Section 8 of this ordinance; and upon all bills so rendered, which shall be paid to the company within ten (10) days after the rendition thereof, a discount shall be allowed of fifteen (15) cents per thousand cubic feet, so as to make the net price when so paid the sum herein specified, or hereafter fixed and determined as aforesaid.

Section 3. Regulation of Rates.—That at any time after the expiration of three years from and after the first day of the month succeeding the acceptance by the company of this ordinance, and at any time thereafter, but not oftener than once in five years, the City Council may, or if requested in writing by the company so to do, shall, by ordinance, fix and determine the rates to be charged by the company both to the city and to private consumers therein; which rates shall in each instance be so fixed and determined, subject to the provisions of Section 5 hereof, and independent of whether or not the laws now or hereafter in force give to the City Council the right, power or authority to so fix and determine the same. The company shall thereupon comply with such ordinance as to rates, subject only to the provisions of said Section 5, and furnish gas at rates not to exceed those so fixed until the same shall be again fixed and determined as herein provided. And the company shall also at all times, unless otherwise determined by the City Council, furnish gas to all consumers other than the city and its various boards and departments, at a uniform rate, and without any discrimination between them.

Section 4. Lighting of streets.—That the City Council shall from time to time have the right, power and authority, if it so elect, independent of whether or not the laws now or hereafter in force grant such right, power or authority, but subject to the provisions of Section 5 hereof, by ordinance, to direct the company to equip the lamp posts used in the lighting of streets with gas with such lamps and other apparatus and appliances as shall by the City Council be deemed necessary or convenient therefor, and care for such lamp posts, lamps and such other apparatus and appliances, and also light and extinguish such lamps, all as the City Council shall require and direct, and all at such price per lamp per annum as shall be determined and fixed by the City Council. And the company shall at all times in all things comply with any and all reasonable requirements or directions of the City Council so made, subject only to the provisions of Section 5 hereof.

Provided, however, that should the city hereafter direct or require the company to equip the lamp posts used in the lighting of streets as herein specified, and the company so equip the same, and should the city thereafter for any reason discontinue the use of the equipment or any part thereof, so required to be furnished by the company, or itself

undertake the care of such lamps and lamp posts and the lighting and extinguishing of such lamps or contract with or employ therefor some person or corporation other than the company, then and in that event the city shall purchase from the company all said equipment, then in serviceable condition, at the reasonable value thereof when so installed by the company (not exceeding the cost of the same thereto) less the fair value of its use while employed by it in the lighting of the streets; such value, if not agreed upon, to be determined by arbitration, as follows: The city shall select one arbitrator, and the company another; these two shall select a third; and the appraisal of said equipment made by the three so selected or by a majority of them, shall be the price to be paid to the company by the city for the same.

Section 5. Rates and prices to be reasonable.—That the rates and prices which shall be fixed and determined by the City Council under and pursuant to the provisions of Section 8 of this ordinance, and the price for the use of the lamps and other apparatus and appliances and the service to be rendered and performed by the company pursuant to the last preceding section, shall always be just and reasonable, and shall not be so fixed as to fail to afford a fair and reasonable return upon the company's capital investment, nor until the company shall be given a hearing or an opportunity therefor before the City Council or a committee thereof as to the reasonableness of the same; and the reasonableness of all such rates and prices shall always be subject to review and correction in any action or proceeding which shall be instituted therefor by the company in any court having jurisdiction of the subject matter

That the company's "capital investment," as that term is used in this ordinance, shall be and mean the fair and reasonable value of its plant as a going concern, having regard to its condition of repair and its adaptability and capacity for generating and furnishing gas. In determining such value, no value shall be placed on good will, or upon the unexpired term of any franchise, or on future profits based upon any unexpired term thereof; and in the determination of such value no regard shall be had to the company's capitalization, as represented by its outstanding stocks and bonds.

That the term "plant" as used in this ordinance, shall in every case be understood to mean all and every part of the property belonging to or under the control of the company, which is used in the exercise of any franchise belonging thereto, and which is within the limits of the city, and necessarily devoted to the generating and furnishing of gas to the city or the inhabitants thereof, including all lands and all rights therein, and all buildings, machinery and apparatus devoted to such service.

Section 6. Sale of stocks and bonds.—That the company shall not hereafter at any time sell or otherwise dispose of any of its bonds or other obligations or any new issue of its corporate stock, except in good faith and at their fair value, nor unless the consideration for the same shall be actual cash and be paid into its treasury and thereupon appropriated to the making of betterments or extensions of its plant, or to the payment of its pre-existing bona fide bonds or obligations; provided, however, that nothing herein contained shall be so construed as to prevent the company from increasing its capital stock, or from issuing new bonds or other obligations under existing mortgages or otherwise, at any time, wherewith to purchase, pay for, take up, ex-

change or replace any mortgage bonds heretofore or hereafter issued or sold by the company, in good faith, and at their fair value.

Section 7. Publicity.—That the company shall, from and after the passage and acceptance of this ordinance, at all times keep within the city, proper and accurate books of account, records and vouchers, which shall, at all times, show correctly and in detail, all its financial transactions, including all of its receipts and disbursements, and the particulars thereof, and all data needful for the preparation by competent accountants of the statements hereinafter provided for.

That the company shall, in the month of January of each and every year, commencing with the year 1911, prepare and file, under oath, with the Comptroller of the city the following, to-wit:

(a) A statement of all assets and liabilities of the company, constituting what is usually known as the balance sheet of accountants, including therein an accurate statement of all corporate stock and bonds of the company at the time outstanding; but not including therein any sum as the value of any franchise of the company in excess of the actual cost of the same; and also,

(b) A statement giving for the previous calendar year the gross receipts of the company from the sale of gas and of by-products and from all other sources of income, item by item; also all expenditures of the company during said year, including, item by item, all dividends and interest paid, the cost of all material entering into the manufacture of gas, all operating expenses, salaries, the cost of all repairs, improvements, betterments and extensions and of all property, real or personal, by it purchased; said statements to be so prepared as to show the net earnings of the company, during such calendar year, from its regular business and from all other sources.

That the company shall, at all times, permit any officer or other person designated by the City Coucil for that purpose, to inspect its plant and all of its other property, and shall, at all reasonable times, allow the City Comptroller of the city, or his deputy, or any accountant or expert selected by the city to inspect all the books, records and vouchers of the company and obtain therefrom any information or data which the City Council may, by resolution, require. And the City Council may, if it so elect, each and every year, commencing with the year 1911, employ one or more accountants, who, when so employed, shall be given by the company full and complete access to all of its said books, records and vouchers; and who shall prepare therefrom and file with the City Clerk within ninety days statements in the form designated in paragraphs "a" and "b" of this section.

That the company shall also, from time to time, furnish such other information regarding the property comprising its plant and business, and the conduct thereof, as the City Council may, by resolution, require. And all information furnished to the City Council by the company, under the provisions of this ordinance, shall be in writing and shall be certified to under oath by the president, secretary or other proper officer of the company.

Section 8. Right of purchase.—That the city shall have the right at its option at the end of twenty (20) years succeeding the 24th day of February, 1910, to purchase the plant of the company by paying therefor its value, which value shall be the company's capital investment, determined as provided in Section 5 hereof. And in case the

city and the company cannot agree upon such value, then the same shall be ascertained by appraisal in the manner following:

That the city through its City Council shall, at least thirty (30) days before the expiration of the term when the appraisal or purchase is to be made, select two appraisers, the company within the thirty (30) days thereafter shall select two appraisers, and the four appraisers so selected, failing to agree within six months as to such value, shall, within thirty (30) days thereafter select a fifth disinterested appraiser. In case the company shall refuse or neglect to appoint two appraisers, or in case the four appraisers named by the city and the company cannot, within the time aforesaid, agree upon such value or upon the fifth appraiser, then the full bench of the district court of Hennepin county, State of Minnesota, or a majority of the judges thereof, may select the other appraiser or appraisers upon application either of the city or of the company. The appraisers so chosen shall forthwith proceed to determine and appraise such value as of the date of the expiration of the term for which the appraisal or purchase is proposed to be made. The decision of a majority of such appraisers shall be final and conclusive, and shall, as soon as made, be given in writing to the city and the company, who shall equally bear the expense of the appraisal proceeding.

That said appraisers may personally or by a person or persons designated by them, inspect the plant and all records, books of account, vouchers, bills, contracts, and documents of the company for the purpose of fully informing themselves of such value.

That any vacancy or vacancies occurring at any time in said board of appraisers by death, resignation, disqualification or inability to act, may be filled within fifteen days, by the party or body making the original appointment, and, if not so filled, by the judges of said court, or a majority of them, upon the application of either the city or the company; provided, five days' previous notice in writing of such application shall have been given to the other party.

That nothing herein contained shall obligate the city to purchase said plant; but if the city shall elect to purchase the same, it shall make such election by ordinance adopted by the City Council within ninety (90) days after the price is so agreed upon, or the decision of the appraisers given as aforesaid. And the city shall have three years after the expiration of the term for which the appraisal shall be made, in which to pay the price so ascertained. If the city shall so elect to purchase, the company shall retain the possession of said plant, maintain the same in good condition and operate the same as herein specified, and be entitled to and receive the profits arising therefrom until the purchase price, ascertained as aforesaid, shall have been paid. But no addition, extension or enlargement of said plant shall be made after the city's election to purchase the same and before payment therefor, without the consent of the City Council thereto and to the cost thereof, which cost shall be paid by the city in addition to the purchase price.

That such purchase, when consummated, shall terminate, or transfer to the city, any and every franchise, right and privilege the company may have or claim under the ordinance mentioned in the preamble hereto, or under the so-called "St. Anthony Ordinance," referred to in Section 10 hereof.

Section 9. Hours of labor and wages.—That no person employed by the company, in manual labor, shall hereafter be required or permitted by it to labor more hours in any calendar day than shall be re-

quired or permitted by law upon work done under any contract, involving the employment of labor, made by or on behalf of the State of Minnesota. And all laborers employed by the company shall hereafter receive wages which shall be just and reasonable, and not less than shall be customarily paid for labor of like character, and requiring like skill or experience.

Section 10. St. Anthony Ordinance.—That any valuation that may for any purpose hereafter be made of the company's plant or property shall not include any sum as the value of any right, privilege or franchise in terms conferred by that certain ordinance entitled "An ordinance granting to certain persons the right to manufacture, furnish and sell gas in the city of St. Anthony, Minnesota," in form passed by the City Council of the City of St. Anthony on the 5th day of December, 1871, and approved on the same day, which ordinance was in form amended as to certain of its provisions, on the 8th day of April, 1872. And the company by the acceptance of this ordinance and its agreement to comply therewith, as provided in Section 15 hereof, shall surrender, relinquish and release any and every right, privilege or franchise mentioned or in terms granted in or by said ordinance so adopted by the City Council of St. Anthony, and so amended as aforesaid, as far as the same, or any thereof, extend, or purport to extend, beyond or after the 24th day of February, 1930.

Section 11. Consolidation forbidden.—That the company shall not at any time hereafter sell, convey or transfer any right, franchise or privilege granted or conferred in or by the ordinance mentioned in the preamble hereto and in Section 1 hereof, or any interest therein, or its plant and property, or any part thereof, to any person, copartnership or corporation, now or hereafter operating or interested in any electric or power plant, within the city, or furnishing light, heat or power in any form to the city or the inhabitants thereof. And the company shall not at any time hereafter purchase or acquire any interest in the franchise or property of, or directly or indirectly consolidate or divide its plant or business or the earnings thereof with any such person, co-partnership or corporation, by means of a pool or holding company or in any other manner or form whatsoever.

Section 12. Effect of company's non-compliance.—That in case the company at any time hereafter violates any condition, requirement or stipulation of this ordinance, on its part to be complied with or performed, either by failing, neglecting or refusing to do what is herein required, or in the doing of that which is herein forbidden, it shall in such case forfeit and pay to the city as a penalty therefor the sum of fifty (50) dollars, which, if not paid, may be enforced and collected by the city from the company, by an action at law in any court having jurisdiction thereof. That in addition to such penalty, so to be incurred as aforesaid, whenever and as often as the company shall continue any such violation of this ordinance without, in good faith, remedying the same by the doing or by the correction of the act, the nonperformance or doing of which shall have constituted such violation thereof for the period of thirty (30) days after written notice of the same shall be given to the company by the city, thereupon the waiver and relinquishment by the city, specified in section 1 hereof, shall be annulled, and the city's option, right and privilege to demand an appraisal and to purchase, set forth and declared in Sections 9 and 10 ·ited in the preamble hereto, shall at once revive and remain operative

and in full force for two (2) years thereafter; provided, however, that any such annullment of said waiver and relinquishment, or any such revival of such option, right and privilege, shall not in any event, even though the city does not purchase, continue or extend any franchise which the company may have, beyond the 24th day of February, 1930. Provided, further, that said relinquishment and waiver shall not be annulled or said option, right or privilege be revived or become operative as aforesaid, until the city council, after a hearing or an opportunity therefor shall be given the company before the city council or a committee thereof, shall determine that such violation of this ordinance by the company shall have occurred, and shall by reason thereof declare the annullment of such waiver and relinquishment and the revival of such option, right and privilege; and provided, also, that such determination and declaration by the city council shall always be subject to review and correction in any action or proceeding which shall be instituted therefor by the company in any court having jurisdiction of the subject matter

Section 13. Other ordinances unaffected.—That the passage of this ordinance and its acceptance by the company shall in no respect repeal or affect the validity of any provision of the ordinance mentioned in the preamble hereto, not inconsistent or in conflict with the terms hereof, or of any existing or future ordinance adopted by the City Council relating to the inspection of gas or gas meters, or prescribing rules or regulations for the manufacture, measurement, sale, pressure, quality or distribution of gas supplied by the company.

The remaining sections, 14, 15 and 16, have to do with "definitions," "acceptance" and time of the ordinance's going into effect.

II. REGULATORY ORDINANCE.

Passed by the City Council of Minneapolis, March 24, 1910, approved by the Mayor, March, 31, 1910, and published in the *Minneapolis Daily News*, April 1, 1910.

AN ORDINANCE.

Providing for the appointment of an Inspector of Gas and defining the duties of such officer, providing for the inspectipn of gas and gas meters, prescribing rules and regulations for the pressure, manufacture, measurement, quality and distribution of gas supplied to consumers, and for the enforcement thereof, and prescribing penalties for the violation of such rules and regulations.

The City Council of the City of Minneapolis do ordain as follows:

(Section 1, "Definitions," omitted.)

Section 2. Appointment of Inspector. That the City Council shall, at the time specified in Chapter 3 of the City Charter for the appointment of other city officers, appoint as Inspector a suitable person recommended to the City Council, in the manner hereinafter provided, as one competent to test gas meters and the quality, purity, pressure and illuminating and heating power of gas.

That the head of the department of chemistry, and the head of the department of physics of the Minnesota State University and the prin-

cipal of the Minneapolis Central High School shall constitute a board for the examination of all persons desiring to apply for such position of Inspector. Said board shall, when seasonably requested to do so by any person desiring to take such examination fix a time when it will examine applicants for said position, which time unless the City Council shall otherwise direct, shall be in the month of December of each even numbered year; and it shall notify the City Clerk of the time so fixed at least two (2) weeks prior thereto. The City Clerk shall, within one week prior to the time so fixed, publish in the official paper of the city a notice of the meeting of said board and the purpose thereof. At the time so fixed, and at such time or times thereafter as said board may by adjournment determine, it shall examine applicants in such manner as it shall deem necessary, respecting their competency to test the quality, purity, pressure and illuminating and heating power of gas and the correctness of gas meters. After such examination, said board shall forthwith, and during the month when it shall so convene, certify to the City Council the names of such persons as said board shall deem fully competent to make such tests. And only persons whose names are so certified shall be eligible to be appointed Inspector; provided, however, that any person who shall have previously held the office of Inspector may be appointed to said office without such certificate from said examining board; and provided also, that a person who has once passed a satisfactory examination before said board, and whose competency has been so certified to by it, shall be subsequently eligible for appointment to the office of inspector without again being examined thereby.

That each member of said board of examiners, as hereby constituted, shall be paid by the city the sum of twenty-five (25) dollars for his services as examiner of applicants for said position.

Section 3. Deputies and Assistants.—That the Inspector may, by and with the consent and approval of the City Council, appoint one or more deputy inspectors, each of whom shall be competent to make any and all of the tests, herein provided for, which he shall be required or directed to make. Each said deputy so appointed shall have the power, under the direction of the Inspector, to perform any duty which he shall be competent to perform and which the Inspector is herein or hereby required to do. And the Inspector and each of his deputies, shall take and file an oath of office, as other city officers are required to do, and shall respectively execute to the city and file with its City Clerk a bond, the Inspector in the sum of one thousand dollars, and each of his deputies in the sum of five hundred dollars, with such conditions as the City Council shall prescribe or approve.

That the Inspector may also, by and with the approval of the City Council, appoint one or more assistants (who need not necessarily be competent to make the tests herein provided for) who shall under his direction supervise the installation of gas and gasoline lamps used in the lighting of streets; see to it that the equipment thereof complies with the requirements of the City Council, and that the same are lighted and extinguished in accordance with the schedule prescribed therefor; and also assist the Inspector in the auditing of bills for street lighting, as the same are from time to time presented, and the performance of such other duties as the Inspector may prescribe or direct.

Section 4. Maps, Card Catalogues and Blue Prints.—That maps of all its existing system of mains and service connections shall,

within six (6) months from the passage of this ordinance, be made or completed by and at the expense of the company as follows: (a) Sectional maps, each drawn to a scale of one hundrad feet (100 feet) to the inch, upon sheets twenty inches (20 inches) in width by thirty inches (30 inches) in length, showing the location and size of all mains in its system and all services from mains to houses or other connections (in so far as the same are known to the company) and designating all such mains and services, so that, by scale measurement, the distance of each main from the boundary line of the street, and of each service from the nearest line of the nearest intersecting street, may as accurately as possible be ascertained and determined. (b) A general map of the whole city divided into four rectangular sections cornering at or near the old City Hall, drawn to a scale of four hundred feet (400 feet) to the inch, showing by proper signs the location and sizes of all mains, all district governors and all booster or high pressure mains, but not the details of intersection or house connection or services, which map shall be supplemented from time to time by new maps so as to show all new extensions, district governors and booster or high pressure mains, as the same shall hereafter be laid or installed by the company.

That the company shall at its own expense, within six months from the passage of this ordinance, prepare and deliver a complete set of blue prints of all said sectional and general maps, to the Inspector and City Engineer, respectively, and thereafter make such additions to, or changes in, said blue prints that the same will at the end of each year then correspond with said maps, as the same shall be from time to time added to or enlarged; all of which blue prints shall be kept and retained by said Inspector and City Engineer, as a part of the records and files belonging to their respective offices. And the company shall also at its own expense, and as soon hereafter as may be practicable (in any event within nine months after the passage of this ordinance) prepare and deliver to the City Engineer a true and correct copy of all of its card catalogue, giving every detail and the measurements locating all its services and mains, which shall at all times be kept up to date for the use of the City Engineer and be placed and kept in his office, as a part of the records and files belonging thereto.

Section 5. Laying of Mains and Services. That the company shall at the request of any person about to become a consumer of gas, in front or at the side of whose premises a main shall exist, without cost to him, connect such main to said premises by the usual service connection. That the company shall also upon the order of the City Council, free from all cost to the city or its citizens, extend its mains in such streets as may be designated, which shall have been previously graded, and in such streets, though ungraded, where the grade shall have been established, and the contour of the ground on an average, figured along the entire length of the proposed extension and over the full width of the roadway, shall be not more than six inches above or below the established grade. Provided, that in every such case at least one consumer on an average for every one hundred and thirty-three (133) feet of the extension ordered, shall first in writing agree to take gas from the company, for a period of not less than one (1) year at the then established rates, or that the estimated annual sales of gas derived from the extension ordered will yield at least twenty per cent (20 per cent) of the total cost thereof. And provided also that the company may after obtaining proper permits and locations therefor from the City

Engineer enlarge, replace, extend or improve its system of mains or services in excess of the above-mentioned requirements to such extent as it shall deem necessary for the improvement or expansion of its business or the regulation of gas pressure.

That the location of new mains in the street shall conform as nearly as may be to the existing system of the company, and shall in all cases be established by the City Engineer, without whose duly signed permit, designating the location, no main or house connection shall be laid. And all mains hereafter laid or replaced by the company shall be cast-iron mains and shall be not less than six (6) inches inside diameter, unless the City Engineer and the Inspector shall jointly, after careful examination in each instance and for a special reason deemed by them to be sufficient, grant a special permit for a smaller size of wrought iron main or for a steel main more than thirty (30) inches in diameter. And the company shall also, so far as practicable, place all gas mains hereafter installed or laid, all services therefrom and all services from existing mains, at such depth below the surface of the ground as will prevent any deterioration from frost or cold in the quality or flowage of the gas supplied therefrom.

That whenever any street is hereafter paved or repaved (not intending to include ordinary grading or macadamizing of streets) the company shall remove therefrom all mains less than six (6) inches in diameter, replace therein cast-iron mains six (6) inches or more in diameter (unless the City Council shall, by resolution, in special instances for reasons deemed to be sufficient, otherwise provide) and shall also examine and renew all defective services, and also add services for such prospective consumers as may be obtained by a careful canvass of the locality.

That if at any time it shall be necessary to change the position of any main or service of the company to permit the city to lay, make or change street grades, pavements, sewers, water mains or other city structures, or city work of any kind, such changes in mains or services shall be made by the company at its own expense, according to the instructions of the City Engineer.

That all digging of ditches, laying of mains and other operations required for gas distribution shall be done at the risk of the company, which shall assume the entire risk of all accidents and hold the city harmless from all cost or damage occasioned thereby; and it shall, if so directed by the City Council, file such bond as may be required to indemnify the city against all damage or other suits resulting therefrom.

That before the company shall interfere with, remove, or alter any pavement, sewer, sewer inlet, or other city structure, it shall deposit with the City Treasurer a sum sufficient to repair, replace, or re-erect the same in the manner required of electric and conduit companies. And the company shall also, when so directed by the City Engineer replace all material excavated from the streets in the laying of its mains or connections, in such manner as he shall direct; and, shall also, if so directed by the City Engineer, during the time intervening between its removal and replacing of street paving of a permanent nature, temporarily plank the space from which the paving has been removed, in such manner as to insure a reasonably smooth street surface across or along the same.

Section 6. Meters and Meter Testing—That the company shall, upon the request of any consumer not in arrears with respect to the payment of any gas bill due to the company, install for his use a

prepayment meter, otherwise called, a "quarter meter," of not more than twenty light capacity, in lieu of the meter in common use which is read monthly; and whenever any such prepayment meter is removed, the consumer shall be refunded such part of any deposit, therein previously made, which shall not have been exhausted.

That the Inspector shall, on or prior to the first day of January, nineteen hundred and eleven (1911) provide and thereafter maintain at the city's expense a suitable place (to be known as the meter inspection room) for the purpose of testing therein all meters complained of by consumers of gas and all other meters used by the company for the measurement thereof. And the company shall be entitled to have a representative present in said room at all times, while any meter is being tested, proved or sealed therein, and be entitled also at all reasonable times to test and prove the accuracy of any appliance used in the testing of meters and the methods used in the testing thereof.

That when a consumer shall make complaint comcerning the accuracy of his meter and pay to the Inspector a fee of one dollar, the Inspector shall give notice of such complaint to the company, which shall thereupon, in the presence of the Inspector at such time as he shall designate, remove said meter from the premises of the consumer to the meter inspection room, and shall also at the same time install, in place of the one so removed, another meter duly tested, proved and sealed. The Inspector, at the time of such removal of any meter, shall securely paste thereon a slip of paper containing his signature, the date of such removal and a description of the premises from which the meter is removed. The meter so removed shall, unless another time be agreed upon, be tested at 9 o'clock a. m. of the succeeding day (omitting Sundays and holidays) at which time a representative of the company and also the consumer may be present. And if upon being tested the meter so complained of be found inaccurate or defective upon any of the tests herein provided for, the one dollar ($1.00) paid by the complainant shall be returned to him, and the company shall in his stead pay one dollar ($1.00) to the City Treasurer, as herein provided.

And whenever any meter upon being tested, as in this paragraph provided, shall be found to measure quantities more than 2 per cent in excess of the standard measurement of gas, the consumer from whose premises such meter shall have been removed, shall be entitled to receive from the company a rebate or return of a sum equal to the percentage of such excess of all moneys paid by the consumer to the company, and measured by such meter from the time it had been installed or previously tested until the time of such retesting thereof, not exceeding, however, a period of six months.

That the company shall not after said inspection room shall have been so provided install any gas meter in the premises of any consumer which shall not have been, subsequent to the prior use of the same, tested, proved and sealed by the Inspector, as herein provided. And the company shall not thereafter use any such gas meter within said city more than three (3) years after it shall have been tested, proved and sealed, or retested, re-proved and re-sealed by the Inspector, in accordance with the provisions hereof; provided, however, that the company may continue the use of each of its meters now installed and in service unless complaint thereof be made, or unless found to be defective, until the same shall be tested by the inspector, as herein provided.

That from and after the time when the inspection room shall be provided and maintained by the Inspector, as aforesaid, the company shall detach and remove thereto to be tested, proved and sealed by the Inspector as herein provided, its meters now or then in service as follows, to-wit: At least one thousand (1,000) thereof each and every month, and all of the same prior to the first day of April, nineteen hundred and thirteen (1913); said meters to be so removed and delivered to the Inspector respectively in the order in which the same have been tested, or retested by the company; another meter duly tested, proved and sealed being installed in the place of each one so removed. And (except as herein before specified, in case of a meter camplained of by a consumer) for each such meter which shall be thus proved, tested and sealed by the Inspector, the company shall pay to the City Treasurer the sum of twenty-five (25) cents as specified herein.

That the Inspector shall carefully protect and guard all meters which come into his possession for inspection and shall tightly cork all such meters during the time the same are in his custody and not being tested. And the Inspector in the testing of each meter shall subject the same to three tests: first, one which proves accurately its registration by means of the standard prover in ordinary use; second, one which proves the steadiness of the light and the freedom of the meter from leakage; and, third, one which proves that the meter registers small quantities of gas. If, under the first test, any meter shall be found to register quantities incorrectly to an extent exceeding two per cent (2 per cent); or if under the second test, the meter is found to leak, or if any noticeable fluctuation in the light is observed; or if, under the third test, the meter fails to register small quanties of gas consumed, the meter shall be turned over to the company for readjustment and the same shall not be again used until the defect is remedied, the meter again tested, found to be correct and duly sealed. But every meter shall be considered correct as to the first test when duly certified and sealed which shall register quantities varying not more than two (2) percentum from the standard measure of gas.

That the Inspector shall have a card made which he shall attach to each meter tested by him and upon such card shall be given the data connected with the testing of the meter aud the time of the testing. If the meter be found to be correct and be so certified by the Inspector, he shall seal the same by a suitable device. And no person other than the Inspector or his deputy shall unseal any such meter or deface, alter, or remove any card so attached thereto by him, or place thereon any card or writing purporting to be the certificate of the Inspector.

That the Inspector shall also number consecutively each and all meters by him tested upon the said card attached thereto, and shall enter in a book kept as a part of the records of his office the number of each meter so tested, the date of the testing thereof, the manufacturer's name and number and the company's number if the same appear thereon.

That the Inspector shall upon the first day of each month file in the office of the City Clerk a certified statement, showing the sum due from the company to the city for the testing of meters upon the complaint of consumers, or otherwise, during the previous calendar month; and the company shall within five (5) days thereafter pay to the City Treasurer the sum due from it to the city for such testing of meters during such previous month. And all money received by the Inspector upon com-

plaint of any consumer, when it is determined that his meter is not inaccurate or defective by any of the tests herein prescribed, shall forthwith be paid to the City Treasurer by the Inspector.

Section 7. Testing Stations. That the city shall at its own expense, as soon as practicable, provide and maintain at least two testing stations (hereinafter called the testing stations) which shall be more than one mile apart, and each of which shall be at or near a center of gas consumption, and not less than one mile, nor more than one and one-half miles, measured in a direct line, from any manufacturing plant of the company.

That the city shall also at its own expense, provide and maintain in each of said testing stations such calorimeters, photometers, pressure gauges and other supplies and apparatus as shall be necessary to determine the pressure, purity, candle power and heating value of the gas supplied by the company, and in the making of any other tests that may from time to time be deemed necessary or desirable by the Inspector.

That all of the equipment and supplies, so to be provided and maintained by the city, and so to be used in the making of tests, shall be of the standard types and qualities, and such as are generally used for such purpose, and shall be tested for accuracy from time to time, so that the tests made hereunder shall be as accurate and fair as is reasonably possible.

That the company shall run a pipe to each testing station (and if so demanded by the Inspector, a new pipe to the existing City Hall Station) from the gas main nearest thereto, all under the supervision of the Inspector, and in such manner as he shall approve ; or, if this be not done by the company, the Inspector is authorized to put in the service himself at the cost of the company. And each pipe so run to any testing station shall be free from all gas cocks or other obstructions which might interfere with, or in any way affect, the proper flow or quality of gas.

That until the city shall provide, maintain and equip testing stations, as herein provided, all tests except as to pressure shall be made at the testing station now located at the City Hall (herein called the City Hall Station.) Until such time the provisions of this ordinance as to the averages at separate stations shall be disregarded, and the tests and the average of tests as made at the City Hall Station, as to all matters except pressure, shall be considered the tests and the average of the tests to be made at said testing stations so to be provided, maintained and equipped by the city.

That in case of any dispute between the city or its inspector on the one side and the company on the other, as to the methods or apparatus employed in the testing of the pressure, purity, candle power or heating value of the gas supplied by the company, the latest notification of the Gas Referees covering Metropolis Gas, London, England, at the time obtainable, when not inconsistent with the express provisions of this ordinance, shall prevail and be conclusive as to such matters upon all concerned. And if any technical matter arise and be in dispute, not covered by this ordinance or by such notification, an arbitration board, as between the city and the company, may be provided upon the demand of either the company or city as follows: The city shall select one expert and the company shall select another; these two selecting a third to be jointly paid by the city and the company; and the decision

of these three or a majority of them upon the matter so in dispute, shall be final and conclusive, as to such technical matter, for the period of one year thereafter.

Section 8. Methods of Testing—General Provisions. That all tests herein provided for shall be made by the Inspector or his deputy; and the company may, if it so desires, have a representative present at any of the usual or stated tests herein mentioned. All tests of candle or heating power, regularly required, shall be made between nine o'clock a. m. and five o'clock p. m., unless such time be for any reason changed by the Inspector, in which event he shall give the company reasonable notice in advance of the change of time. And the volume of all gas used upon such tests shall be corrected to a standard temperature of sixty (60) degrees Fahrenheit and to a standard barometric pressure of thirty (30) inches of mercury. But the Inspector may, if he deem it advisable, make tests of the pressure, purity, candle power and heating value of gas at as many places (including the works of the company) as he may select without notifying the company thereof, such tests to be in addition to the usual tests made at the regular testing stations; but the same shall not be used by the Inspector in the making out of the daily or monthly averages herein provided for.

That the Inspector shall keep a full and complete record of all tests by him made, which shall at all reasonable times be open to the inspection of the company, and shall make monthly reports thereof to the City Council. He shall, moreover, each day, post in a public place in the testing stations or City Hall, the results of any and all tests upon which the gas is found not to comply with the requirements of this ordinance.

That whenever upon any test made of gas for the purpose of ascertaining its purity, candle power or heating value, as herein provided, it shall be found in any such respect not to comply with the requirements of this ordinance, the Inspector shall forthwith and within twenty-four hours thereafter (not including Sundays or holidays) deliver at the office of the company a notice in writing specifying such defect; and he shall thereupon make similar tests on each and every day thereafter, except Sundays and holidays (advising the company in like manner as to the result thereof), until the gas shall be found to be free from such defect.

That whenever the Inspector is required by this ordinance to deliver any notice or other paper at the office of the company, Mayor or City Clerk, he may do so by a deputy or other messenger; and that the company shall at all times, during the usual office hours, have some representative in its office who shall receive such notice or paper so delivered and acknowledge in writing the time of the receipt thereof.

Section 9. Impurities in Gas.—That tested as provided herein the gas supplied by the company shall not at any time contain more than four (4) grains of ammonia in any one hundred (100) cubic feet thereof; nor shall the gas, so tested, at any time between the first day of April and the first day of October in any year, contain more than twenty (20) grains of total sulphur in any one hundred (100) cubic feet of the same, or at any other time more than thirty (30) grains of total sulphur in any one hundred (100) cubic feet thereof. And the gas supplied by the company shall at all times be wholly free from sulphuretted hydrogen, as determined by the particular test herein specified.

That the Inspector shall test the gas supplied by the company to determine the quantity of total sulphur and ammonia therein at least once in each week, and to determine the presence of sulphuretted hydrogen therein on each one of at least twenty (20) days of each calendar month, using for that purpose in each instance the test prescribed therefor in the notification of the Gas Referees, covering Metropolis Gas, London, England, published in the year 1909, or such other test as may be agreed upon by the company and the inspector, and which as applied to total sulphur and ammonia will give accurate results. And whenever and as often as the test prescribed for sulphuretted hydrogen shall show the presence thereof in the gas, or the test prescribed for total sulphur and ammonia, respectively, shall show the presence thereof in excess of the quantity herein prescribed, he shall as to each test wherein the gas fails to comply with the requirements hereof make a like test on each and every day thereafter (except on Sundays and holidays) until the test shall show that the gas complies, in the particulars involved therein, with the requirements of this section.

Section 10. Candle Power of Gas.—That the gas supplied by the company, tested as provided in this section, shall be of at least eighteen (18) candle power; that is, of such quality that the gas when burned at the rate of five cubic feet per hour, under standard conditions of temperature and barometric pressure, in any ordinary lava tip or open flame burner in common use, giving the full candle power of the gas, shall give a light as measured by any standard bar photometer in common use, of not less than eighteen (18) standard candles—it being understood that a standard candle is the unit of light prescribed and maintained by the United States Bureau of Standards, known as the International candle, which is equal to one Pentane candle, one Bougie decimale, one American candle, 1.11 Hefner units, or 0.104 Carcel units.

That the Inspector shall test the candle power of the gas upon at least twenty (20) separate days of each month. In the making of such tests he may use Pentane lamps, previously standardized by the United States Bureau of Standards or such other suitable burner or apparatus agreed upon between the Inspector and the company as will measure the correct candle power of the gas, as herein defined.

That the Inspector shall make two (2) separate and distinct tests on each day when tests are made to determine such candle power, at an interval of not less than four (4) hours, at the City Hall Station or testing stations, and the average of the tests so made shall be deemed to represent the candle power of the gas on the day of such tests.

Section 11. Heating Power of Gas.—That the gas supplied by the company, tested at the City Hall Station or testing stations as provided herein, shall give a monthly average gross heating value of not less than six hundred (600) British thermal units per cubic foot of gas; and that the daily average gross heating value of the gas supplied by the company, tested at any such station, shall not on any day be less than five hundred and fifty (550) British thermal units.

That the gas shall be tested for the purpose of determining its heating value twice each day, at an interval of not less than four (4) hours, upon at least twenty (20) days during each and every month, at the City Hall Station or testing stations.

That the average of each of the two tests at the City Hall Station or at the testing stations (hereinafter called the daily average at the stations) shall be deemed to represent the gross heating value of the gas

on the day of such tests; and that the daily average so ascertained, for each and every day of the month upon which said tests shall have been made, shall be again averaged and the result (hereinafter called the monthly average at the stations) shall be deemed to represent the gross heating value of the gas during the then current calendar month.

That the Inspector shall after the computation of any monthly or daily average of the heating value of gas so ascertained, forthwith, and within twenty-four (24) hours, deliver a statement thereof at the company's office, so it may know the averages thus obtained, and also file a statement of such monthly average in the office of the City Clerk.

Section 12. Pressure of Gas.—That the company shall proceed forthwith to repair, reinforce and re-equip its present system of distribution and regulate and equalize the same, so that its system shall as soon as possible be in all respects adequate to meet, as to pressure of gas, the requirements hereinafter set forth, within the time hereinafter specified, and in any event on or prior to January first, nineteen hundred and twelve (1912). And to that end, the company shall, within two (2) years after this ordinance shall become effective, construct and thereafter maintain a gas holder, at some suitable place within the city upon the east side of the Mississippi river, of such capacity as will adequately supply the demand for gas in that locality, and maintain the pressure thereof within the limits herein prescribed. And the company shall also hereafter maintain, extend and improve its distributing system, with due regard to the fact that it is the intention of the city (hereby expressed) to require the company on and after January first, 1913, without the use of house governors, to maintain a pressure of gas as uniform as may be, that will never be less than two (2) inches nor more than four (4) inches of water pressure in any of its mains on the level of the water in the gas works holder, or elsewhere except as the same may be due to the elevation of the main above such level.

That on and after the first day of July, nineteen hundred and ten (1910) the pressure of gas supplied by the company, tested at any point where the unobstructed service pipe enters the building of the consumer, shall never be less than two (2) inches nor more than six (6) inches of water pressure, and that the variation of pressure upon any day at any such point shall never be greater than one hundred per cent (100 per cent) of the minimum pressure upon the same day and at the same point. Provided, however, that the company may, prior to January first, nineteen hundred twelve (1912) install a house governor at the place where the gas enters the consumer's premises upon filing in each instance with the Inspector a written declaration of its purpose to install the same, together with a description of the premises in which it is to be placed, which declaration shall be kept by the Inspector as a part of the records and files of his office; provided also that the company may, after January first, nineteen hundred and twelve (1912) install any such house governor upon obtaining from the Inspector a special permit therefor, as hereinafter provided. The company shall whenever any such house governor is removed, forthwith file written notice of such removal with the Inspector, and shall on the first day of each and every month file in the office of the City Clerk its certified statement showing the aggregate number of such house governors then in use by the company. But the company shall not, after the first day of January,

nineteen hundred and twelve (1912) continue the use of any house governor previously installed, and shall not thereafter install, maintain or use any such governor, except at such place and for such period of time only as the Inspector shall, after careful examination in each instance and for some special reason, deemed by him to be sufficient, by his duly signed permit, allow. And whenever any such special permit shall be granted, a duplicate copy thereof shall be kept and preserved by the Inspector as a part of the records and files of his office.

That from and after the passage of this ordinance the Inspector shall at least once each month, if he so determines, without notifying the company, make a general test of the maximum and minimum pressure of gas supplied by the company at any hour or at all the hours of one whole day; and the Inspector shall also obtain and keep a continuous record of gas pressure daily at not less than ten (10) points within the district furnished with gas, by means of recording gauges, so distributed as to cover as nearly as possible the whole distribution system of the company, the supply of gas to said recording gauges being taken from unobstructed service pipes direct from the mains. The Inspector may also, in like manner, at any time prior to January 1st, 1912, without notice to the company, determine, at as many points as he may deem advisable, the gas pressure in any street main, or in any service pipe at the inlet and outlet of the meter of any consumer.

And it shall be the duty of the Inspector and City Engineer during the years nineteen hundred and ten (1910) and nineteen hundred and eleven (1911) by reference to the record of gas pressure so obtained, and their knowledge of the work being done by the company to restore and perfect its distribution system, to make monthly joint or separate reports concerning the same to the City Council and to suggest and recommend such additions, alterations, or enlargements therein as will in their opinion correct any defect in gas pressure deemed by them or either of them to then exist therein.

That if at any time, between the first day of July, nineteen hundred and ten (1910) and the first day of January, nineteen hundred and twelve (1912) the pressure of the gas supplied by the company to any consumer shall fail to comply with the requirements of this section, and the consumer complain thereof to the company, it shall, if the defect be due to local conditions, within seventy-two (72) hours thereafter, and if due to other conditions, within a reasonable time thereafter, remedy the defective pressure, so that the pressure will comply with such requirements; and if necessary to remedy the same the company shall at its own expense install and maintain a house governor at the point where the gas enters the consumer's premises, first filing with the Inspector a notice of its intention to install the same, as hereinbefore provided. And should any such consumer, after the company has undertaken to remedy any such defect in pressure, pursuant to the requirements of this paragraph, be of the opinion that the same has not been corrected, as herein required, and give to the Inspector notice thereof, the Inspector shall forthwith test the pressure of gas supplied to the consumer's premises by the use of recording or visual gauges and furnish to the consumer and the company, respectively, a written statement of the results thereof. And the company shall also, on each and every Monday between July 1st, 1910, and January 1st, 1912, file with the Inspector its certified statement showing the number of such complaints made within the previous calendar week, together with the

respective names and residences of the complainants, and the respective points at which the pressure is so complained of.

That on and after the first day of January, nineteen hundred and twelve (1912), the Inspector, if he deems it proper, may, and in case improper pressure as herein defined be complained of shall, test the pressure of gas in the service or house pipe at the inlet or outlet of any consumer's meter by means of a recording or visual gauge ; and if it be thus found that the pressure at any such point does not comply with the requirements of this ordinance, due allowance being made for meter friction, the Inspector shall within twenty-four hours thereafter deliver at the company's office a notice in writing of the defect ; and the company shall, if the defect be due to imperfect conditions in the service pipe or in any governor placed by the company therein, remedy such defect within forty-eight (48) hours thereafter, or if due to any other cause, remedy such defect within a reasonable time thereafter. And the company shall, upon remedying such defect as aforesaid, forthwith and within twenty-four hours notify the Inspector that the defect has been corrected, so he may ascertain if the pressure then complies with this ordinance.

Section 13. Meter Deposits, Disconnections and Gas Bills. That the deposit required of any consumer of gas as security for payment therefor shall not exceed the probable amount of his one month's consumption thereof. And the company shall pay interest at the rate of six (6) per cent per annum on every such deposit heretofore or hereafter made for the purpose aforesaid, if the sum exceeds one dollar ($1.00), such interest to be paid semi-annually.

That forty-eight (48) hours' notice in writing shall be given the company by a consumer before he shall quit the premises where he shall have been supplied with gas ; and in default of such notice the consumer so quitting shall be liable to pay the company for any gas supplied to said premises before the time for the next reading of the meter therein.

That in addition to the usual form of gas bills made out by the company there shall be printed upon the face thereof in bold type the following words : " Discount allowed for deficiency in gross heating value ; " and the amount of the discount, if any there be, to the consumer pursuant to the provisions of this ordinance shall be inserted after such words, and be deducted from the amount of the bill.

Section 14. Discount for Heating Deficiency. That should the monthly average gross heating value of the gas at the City Hall Station or testing stations (determined according to Section 11 hereof) at any time fall below six hundred (600) British Thermal Units, every consumer of gas within the city during the month when the deficiency shall occur, shall be entitled to and shall receive a pro rata discount upon his gas bill therefor. The percentage of such discount shall be ascertained by dividing the number of British Thermal Units of such average monthly deficiency at the City Hall or testing stations by the standard of thermal units specified therefor by said Section 11, which percentage shall be used by the company in computing the discount of its bills for the month, which discount shall be deducted from the gas bill for the succeeding month or be paid to the consumer in cash.

That the Inspector shall deliver at the office of the City Clerk and the Mayor respectively, and also deliver at the office of the company, a copy of his computation of the discount in the monthly bills, for each

month in which a discount therefrom shall be made pursuant hereto, on or before the 5th day of the succeeding month, and also post a copy thereof in the usual place selected by him for that purpose, certifying therein that the average of heating value as determined at the City Hall Station or testing stations, is the average of at least twenty (20) tests made two in each day upon separate days during said month, wherein the deficiency shall occur.

Section 15. Penalties.—The company shall be subject to and pay a fine of one hundred dollars ($100) whenever and as often as it shall violate this ordinance and be convicted thereof in the Municipal Court of the City of Minneapolis, in each of the following cases, viz: (a) In case it shall fail for any three successive days after January first, nineteen hundred and twelve (1912) to correct within a reasonable time any defect in the pressure of gas (as prescribed in Section 12 hereof) not due to improper conditions in the service pipe or the governor connected by the company thereto; (b) In case of any deficiency for any three successive days in the candle power of the gas prescribed by Section 10 of this ordinance; (c) in case of the presence in the gas for any three successive days of sulphuretted hydrogen according to the test prescribed by Section 9 hereof; (d) in case of the presence in the gas for any three successive days of sulphur other than sulphuretted hydrogen, in excess of the quantity prescribed in said Section 9; (e) In case of the presence in the gas for any three successive days of ammonia in excess of the quantity prescribed in said Section 9; (f) In case of the company's failure for any three successive days to furnish gas the average daily gross heating value of which at the City Hall Station or testing stations shall not be at least five hundred and fifty (550) British Thermal Units as prescribed in Section 11 hereof. Provided, however, that before the company shall in any such case be or become subject to any such fine the Inspector shall, upon the discovery of the specified defect in the pressure or quality of the gas, by the test hereinbefore provided for the detection thereof, forthwith and within twenty-four (24) hours thereafter (not including Sundays or holidays) deliver, at the office of the company, a notice in writing specifying such defect and deliver a like notice at the office of the Mayor and City Clerk respectively; and shall, if upon the succeeding day he finds the same defect, again give notice thereof in like manner, and shall on the third succeeding day if he finds the same defect forthwith and within twenty-four (24) hours thereafter give notice thereof by means of an affidavit, stating the three days' defect, duly verified before an officer authorized to administer oaths, delivered at the office of the company, and by like affidavit delivered at the office of the Mayor and City Clerk respectively.

That if the company shall violate this ordinance by not delivering to the City Engineer and Inspector, respectively, blueprints of the maps of its mains and services and a copy of its card catalogue in the form prescribed by Section 4 hereof, within the time or times prescribed in said section, or by failure to supplement, add to or enlarge the same as therein provided, it shall, upon conviction thereof in said Municipal Court, be subject to and pay a fine of one hundred dollars ($100), and for each day's additional delay in so delivering the same thereafter shall, upon conviction thereof in said court, be subject to and pay a further and additional fine of fifty dollars ($50).

That whenever and as often as the company shall on or after the first day of January, nineteen hundred and twelve (1912), violate this or-

dinance by failing to correct any defect in pressure of gas, due to any improper condition of the service pipe or any governor connected by the company therewith, within seventy-two (72) hours after notice of such defect, as hereinbefore provided, it shall upon conviction thereof in said Municipal Court be subject to and pay a fine of ten dollars ($10) and for each additional seventy-two (72) hours' delay in correcting such defect, it shall upon conviction thereof in said court be subject to and pay a further and additional fine of ten dollars ($10).

That whenever and as often as the company shall at any time on or between the first day of July, nineteen hundred and ten (1910) and the first day of January, nineteen hundred and twelve (1912), violate this ordinance by failing to remedy any defect in pressure of gas upon the complaint of any consumer, as required by Section 12 of this ordinance, it shall upon conviction thereof in said Municipal Court be subject to and pay a fine of ten dollars ($10); and for each additional seventy-two (72) hours' delay in remedying such defect, as required by said section, the company shall upon conviction thereof in said court be subject to and pay a further and additional fine of ten dollars ($10).

That whenever and as often as the company shall at any time violate this ordinance, in the laying or replacing of any main which shall not be a cast-iron main or shall be less than six inches inside diameter, without the consent of the City Council or without having previously obtained a special permit therefor from the City Engineer and Inspector, as provided in Section 5 hereof, the company shall upon conviction thereof in said Municipal Court be subject to and pay a fine of one hundred ($100) dollars. And upon any such violation of this ordinance each and every officer, agent and servant of the company and every other person concerned therein, or who shall directly or indirectly participate in such violatien thereof shall, upon conviction thereof before said Municipal Court, be punished therefor by a fine of one hundred (100) dollars, or by imprisonment for a term not exceeding ninety (90) days.

That whenever and as often as the company shall violate this ordinance by failing, neglecting or refusing to lay any service or main when required or ordered to do so pursuant to the provisions of Section 5 hereof, it shall upon conviction thereof in said Municipal Court be subject to and pay a fine not exceeding one hundred (100) dollars, and for each day's additional delay in laying such service or main, the company shall upon conviction thereof in said court be subject to and pay a further and additioual fine not exceeding fifty (50) dollars.

That whenever and as often as any person other than the Inspector or his deputy shall unseal any meter, or deface, alter or remove any card or paper attached thereto or pasted thereon by the Inspector, or place thereon or attach thereto any card or writing purporting to be the certificate of the Inspector, he shall upon conviction thereof in said Municipal Court be punished by a fine of twenty-five (25) dollars or by imprisonment for a term not exceeding twenty-five (25) days.

That whenever and as often as the company shall make, deliver or transmit to any consumer a gas bill contrary to the requirements of Section 13 hereof, or fail to deduct from any gas bill rendered to a customer, or to pay to the consumer in cash, the full amount of any discount determined and computed, as provided in Section 14 hereof, which may become due to such consumer as therein provided, the company shall upon conviction thereof in said Municipal Court be subject and pay a fine not exceeding the sum of ten dollars ($10).

And whenever and as often as the company, at any time hereafter, shall violate any provisions of this ordinance, on its part to be complied with or performed, in any respect or particular not herein before in this section specified, either by failing, neglecting or refusing to do that which is herein in this ordinance required, or in the doing of that which is herein in this ordinance forbidden, it shall upon conviction of such violation thereof in said Municipal Court be subject to and pay a fine not exceeding the sum of one hundred (100) dollars.

Section 16. Repeal.—That all ordinances of the city and parts thereof contravening or inconsistent with the terms of this ordinance are hereby repealed.

Section 17. Time of Becoming Effective.—That this ordinance shall take effect and be in force from and after its passage and publication.

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